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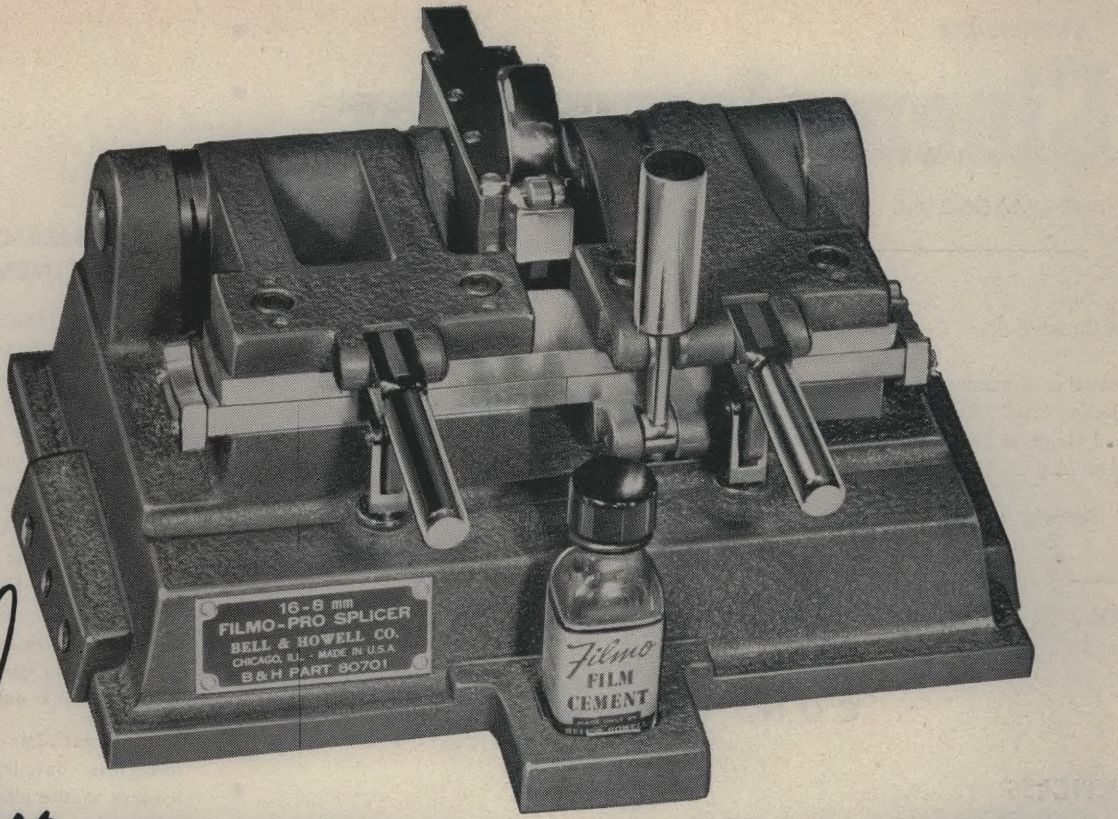

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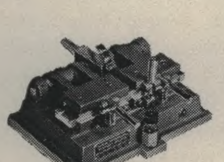

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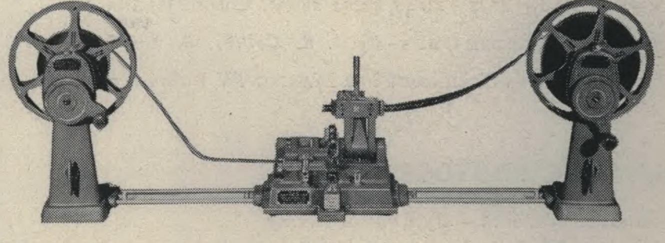

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Editorial and Business Office: 1782 N. Orange Dr., Hollywood 28, Calif.
Telephone: GRanite 2135

VOL. 31 JULY • 1950 NO. 7

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ON THE COVER

RAY FERNSTROM, A.S.C. (far right) goes into huddle with Jack Voglin and director Gunther V. Fritsch on story-board layout for series of television films produced by United Productions of America for the Ford Motor Company and photographed by Fernstrom on one of Hollywood's largest sound stages. Taking light meter reading is gaffer Robert Campbell while grip Bob Welch shifts camera boom into position for a closeup of the "star"— a shiny new 1950 Ford sedan. Riding boom are (L to R) Jack Whitman, assistant cameraman, and operator Les Shorr.

AMERICAN CINEMATOGRAPHER, established 1920, is published monthly by the A. S. C. Agency, Inc., 1782 N. Orange Dr., Hollywood 28, Calif. Entered as second class matter Nov. 18, 1937, at the postoffice at Los Angeles, Calif., under act of March 3, 1879. SUBSCRIPTIONS: United States and Pan-American Union, $3.00 per year; Canada, $3.00 per year; Foreign, $4.00. Single copies, 25 cents; back numbers, 30 cents; foreign single copies, 35 cents; back numbers, 40 cents. Advertising rates on application. Copyright 1950 by A. S. C. Agency, Inc. AUSTRALIAN REPRESENTATIVE: McGill's, 179 Elizabeth St., Melbourne.

★

AMERICAN SOCIETY OF CINEMATOGRAPHERS

FOUNDED January 8, 1919, The American Society of Cinematographers is composed of the leading directors of photography in the Hollywood motion picture studios. Its membership also includes non-resident cinematographers and cinematographers in foreign lands. Membership is by invitation only.

The Society meets regularly once a month at its clubhouse at 1782 North Orange Drive, in the heart of Hollywood. On November 1, 1920, the Society established its monthly publication "American Cinematographer" which it continues to sponsor and which is now circulated in 62 countries throughout the world.

Dominant aims of the Society are to bring into close confederation and cooperation all leaders in the cinematographic art and science and to strive for pre-eminence in artistic perfection and scientific knowledge of the art.

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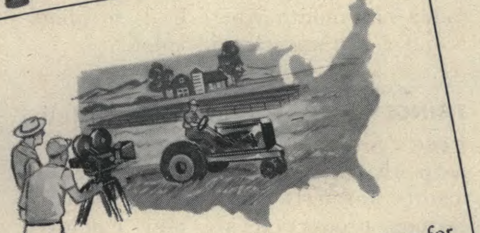

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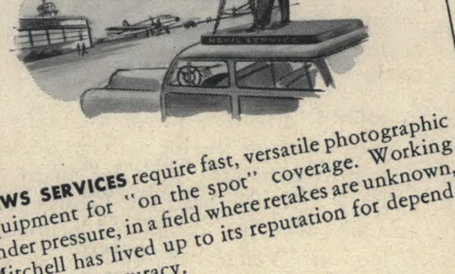

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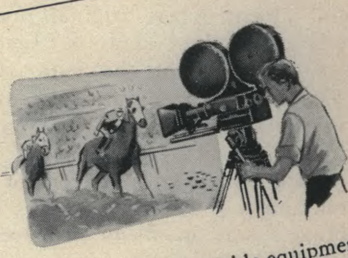

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Hollywood
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MILTON KRASNER, A.S.C., winner of Picture Of The Month award for April for photography of Fox's "Three Came Home."

MILTON KRASNER, A.S.C., was voted winner of the ASC's "Picture Of The Month" award for May and presented with a commemorative plaque at the Society's monthly dinner-meeting, June 5th. Presentation of plaques also was made to Charles Rosher, A.S.C., winner of award in January for "Red Danube," and absent when original presentation was scheduled; and to Leo Tover, A.S.C., winner of the joint award for March for the photography of "When Willie Comes Marching Home." Ted McCord, A.S.C., who shared the dual March award with Tover for his photography of "Young Man With A Horn," was unable to be present at the awards presentation.

●

CHARLES G. CLARKE, A.S.C., it was announced just as we went to press, has been nominated for the ASC's "Picture Of The Month" award for May for his photography of "The Big Lift," produced by 20th Century Fox. Clarke, who is presently in France, is expected back in Hollywood in time to receive the award which will be presented at the Society's next monthly meeting, July 17th.

●

JOSEPH WALKER, A.S.C., is in Washington, D.C., photographing "Born Yesterday" for Columbia Pictures. Assignment marks change of pace for Walker whose previous pictures have been shot mostly indoors on Columbia sound stages. Present picture is being filmed almost entirely on location, utilizing no studio sets but shooting necessary interiors in Washington locales with the aid of the most advanced remote lighting techniques.

●

KARL STRUSS, A.S.C., has been engaged by Charles Laughton to light stage settings for his initial footlight presentation "The Cherry Orchard," at the new Stage Theatre in Los Angeles. Laughton, impressed with Struss' skill in lighting motion picture sets, singled him out to apply advanced studio lighting techniques to his new stage production. Struss, incidentally, receives program credit for this assignment.

●

OLLE COMSTEDT, A.S.C., sailed for Bermuda last month where he is to photograph a documentary in color.

●

THINGS are looking brighter for Hollywood's film animators. The industry reports that more than 22% of the animators formerly engaged in animated cartoon production are now employed turning out animated advertising films for television.

●

MICHAEL DOYLE, 21 years a cameraman in Hollywood, has been appointed Associate Professor at University of California, Department of Cinema Arts.

●

TOM TUTWILER, A.S.C., has returned to Hollywood following a twelve-week stint photographing exteriors in Texas for RKO's "Jet Pilot."

●

MGM'S directors of photography have seen more off-the-lot activity during the past two months than for many years. Back at home base are George Folsey, A.S.C., who just completed location filming on "Vengeance Valley" at Cañon City, Colorado; Joseph Ruttenberg, A.S.C., having wound up production and background shooting for "Magnificent Yankee" in Washington, D.C.; Charles Rosher, A.S.C., back from Hawaii and continuing to shoot "Pagan Love Song" on Metro's sound stages; and William Mellor, A.S.C., who was on location filming scenes for "Across The Wide Missouri." Hal Rossen, A.S.C., who returned the middle of June from Indianapolis where he filmed "To Please A Lady," planed out for Kentucky following week to scout locations for MGM's forthcoming "Red Badge of Courage." Alfred Gilks, A.S.C., is shooting exteriors at Sonora, California, for "Shep Of The Painted Hills." Bob Surtees, A.S.C., and William Skall, A.S.C., are already grinding out Technicolor footage in Italy for MGM's "Quo Vadis," and the studio is highly enthusiastic over the results shown in first dailies.

●

THREE OLD-TIME Columbia "regulars" were back on the Gower Street studio roster last month: William Snyder, A.S.C., scheduled to start filming "Flying Fish"; Phil Tannura, A.S.C., directing the photography on "Counterspy Meets Scotland Yard"; and Joseph Walker, A.S.C., who's photographing Columbia's top-budget production, "Born Yesterday."

●

VICTOR MILNER, A.S.C., representing the Academy of Motion Picture Arts and Sciences, addressed the National Retail Dry Goods Association mid-year conference held at the Biltmore Hotel in Los Angeles last month.

Five members of the Academy spoke on "Motion Picture Techniques Applicable to Visual Merchandising." In addition to Milner, who outlined the work of the cinematographer and pointed out how motion picture lighting techniques could be applied advantageously in lighting store and window displays, other speakers included Paul Groesse, art director; Henry Grace, set decorator; Edith Head, costume design; and Howard G. Mayer, public relations. More than 1800 store representatives from around the nation attended the conference.

●

PAUL C. VOGEL, A.S.C., and **FRANK F. PLANER**, A.S.C., have been cited by DuPont in the June-July, 1950, issue of "DuPont Magazine" for their award-winning achievements during 1949 with DuPont motion picture film. Full page story and layout pictured both cinematographers plus clips from their award-winning films. Vogel won "Oscar" this year for photography of MGM's "Battleground." Planer won Globe Award of Hollywood Foreign Correspondents for filming "Champion."

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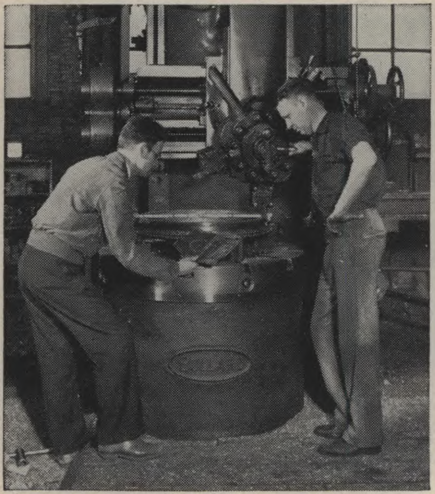

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CRITICAL AUDIENCE, among them some of the movie industry's top directors of photography, watch screening of movies of themselves, photographed earlier same evening at the A.S.C. clubhouse in Hollywood. Berndt-Bach, Inc., staged event to demonstrate Cine-Voice camera.

Cine-Voice Demonstrated For A.S.C.

THE MEN BEHIND the cameras were shown how they looked *before* the camera at the June meeting of the American Society of Cinematographers. As a combination equipment demonstration and program innovation, Berndt-Bach, Inc., makers of Auricon cameras and sound equipment, sent technicians and cameramen to the A.S.C. clubhouse with two of the new Auricon Cine-Voice 16mm. single system sound cameras and made movies in sound of the cinematographers.

Camera setups ranged from simple shots picturing groups of A.S.C. men examining Auricon equipment, to scenes of the presentation of Picture of the Month plaques to Charles Rosher, Leo Tover and Milton Krasner by A.S.C. veepee Arthur Edeson, subing for president Ray Rennahan who was absent.

Films were then rushed to the local Cine Craft laboratories for quick processing and returned before close of meeting and screened. The demonstration aptly displayed the potentials of the new, popular priced Cine-Voice sound camera, introduced earlier this year as a new tool for advanced movie amateurs, television newsreel and film producers, and industrial firms wishing to make their own instructional and promotional films in sound.

The camera, engineered with the same precision and finish that go into its big brothers, the Auricon-Pro and the Auricon 1200 cameras, takes 100 foot rolls of daylight-loading film. Although the standard model is a single-lens job, a

(Continued on Page 248)

CAMERAMAN Charles Short shoots A.S.C. members with one Cine-Voice camera while they examine features of another and discuss its merits.

SHORT and sound-man Al Brown get set to shoot presentation of "Picture Of The Month" Awards to Charles Rosher, Leo Tover and Milton Krasner.

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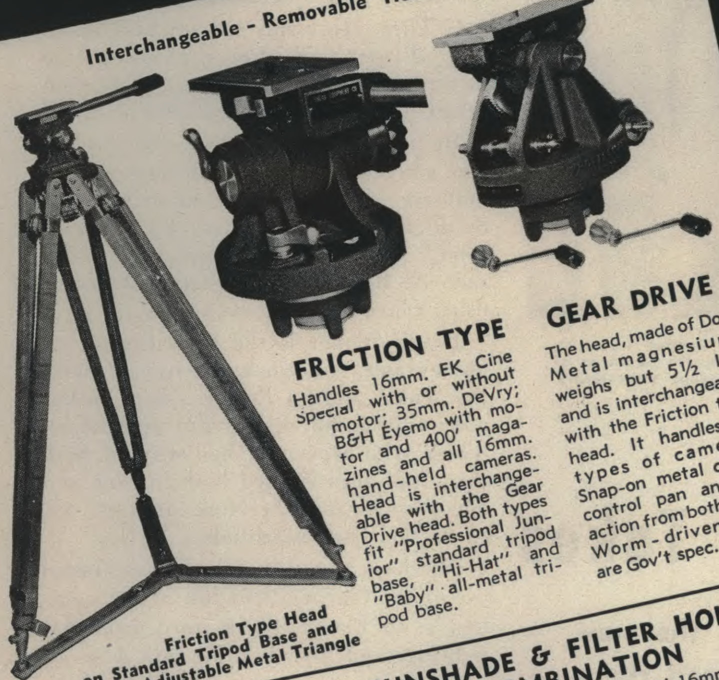

Friction Type Head on Standard Tripod Base and Collapsible Adjustable Metal Triangle

FRICTION TYPE

Handles 16mm. EK Cine Special with or without motor; 35mm. DeVry; B&H Eyemo with motor and 400' magazines and all 16mm. hand-held cameras. Head is interchangeable with the Gear Drive head. Both types fit "Professional Junior" standard tripod base, "Hi-Hat" and "Baby" all-metal tripod base.

GEAR DRIVE

The head, made of Dow Metal magnesium, weighs but 5½ lbs. and is interchangeable with the Friction type head. It handles all types of cameras. Snap-on metal cranks control pan and tilt action from both sides. Worm-driven gears are Gov't spec. bronze.

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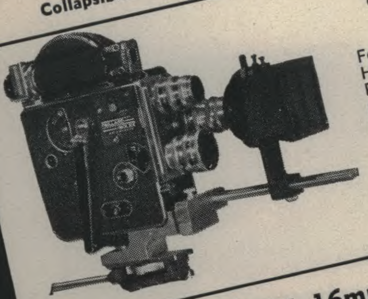
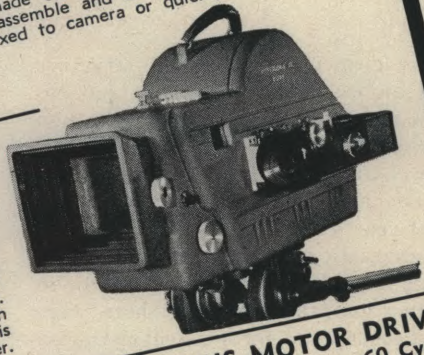


For use with Bolex and Cine Special 16mm. cameras. Holds two 2" sq. glass filters and 2½" round Pola Screen with handle which can be rotated for polarization. Covers all lenses from 15mm. to 6" telephoto and eliminates need of various filters. Precision made of the finest materials. Compact, simple to assemble and dismount. May be permanently affixed to camera or quickly detached.



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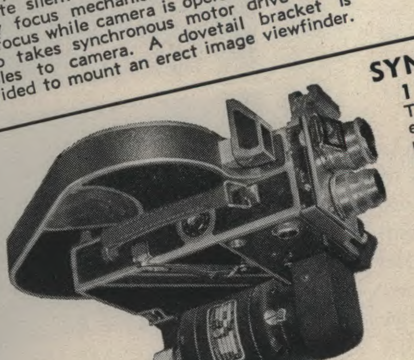
This Blimp constructed of Dow Metal magnesium, is thoroughly insulated to afford absolute silent operation. Exclusive features: Follow focus mechanism permits change of lens focus while camera is operating in blimp. Blimp takes synchronous motor drive which couples to camera. A dovetail bracket is provided to mount an erect image viewfinder.



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110 Volt A. C., Single Phase, 60 Cycle

This motor will run in synchronization with either 16mm. or 35mm. sound recorders. It is provided with mounting platform which permits removal of magazine while camera remains mounted on motor.

Drive coupling attaches to single-frame shaft of camera and is mated to spring-steel drive arm of motor gear box. This assures that camera mechanism cannot be damaged if a film jam occurs as the spring steel arm drive will shear. This is easily replaced.

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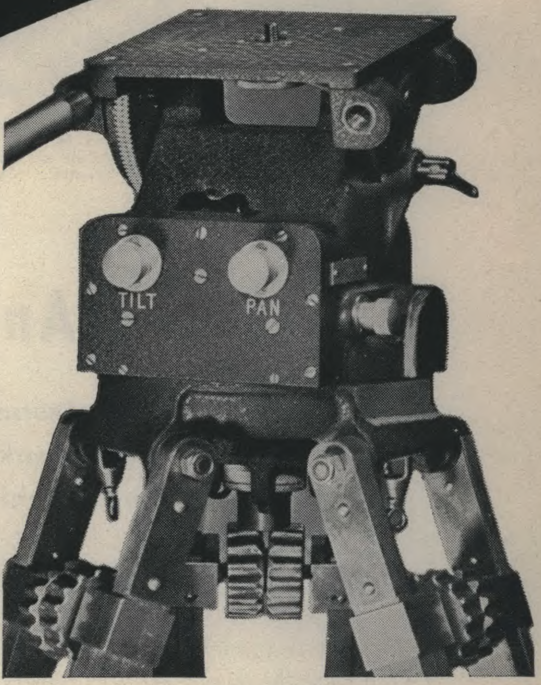

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New, small size GYRO tripod handles all 16mm. professional type cameras: Mitchell 16mm.; Auricon single system; Maurer 16mm.; motor-driven Cine Special; also 35mm. motor-driven Eyemo with 400' magazine. It features Super Smooth Pan & Tilt Action.

Positive pan-locking knob. Tilt locking lever. Quick wrist action locking knob for leg height adjustments. Pan handle can be inserted at 3 different positions on tripod head for operator's convenience or extreme tilt work. Legs are hard maple specially treated and warp resistant. Tripod head is Dow Metal magnesium and aluminum. Built-in spirit level. Swivel tie-down rings. Platform can be equipped for either ⅜ or ¼ inch camera screw.

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FRANK PLANER, A.S.C., explains to producer Stanley Kramer how use of Garutso lens cuts production costs by eliminating need for many intermediate shots. Extreme depth of focus of lens makes possible picking up detail at distances, making setups for closeups unnecessary. Planer is using lenses in filming Kramer's "Cyrano de Bergerac."

Deep Focus And Longer Takes

Increased pictorial plasticity achieved with the new Garutso lenses, says Frank Planer who has used them exclusively in photographing three major productions.

By LEIGH ALLEN

When the Garutso lens was introduced to the motion picture industry a year ago by Dr. E. Goulden, it was recognized as a promising new lens with new pictorial and economic possibilities. It demonstrated in tests remarkable ability to produce exceptional sharp images with greater depth of focus than heretofore obtainable with many conventional lenses, also that it made possible shorter shooting schedules by eliminating need for many intermediate camera setups. Later it was "re-discovered," you might say, by an imaginative and enthusiastic director of photography who explored still further the lens' possibilities. He ultimately proved its full potentialities by photographing with a Garutso lens every scene of a major Hollywood production.

Described at length by R. M. Newbold in the September, 1949, issue of *American Cinematographer,* the Garutso actually is not a new lens line but a conventional camera lens modified according to the patented Garutso principle. This consists of adding one or more annular elements to the lens structure which increases depth of focus and enhances definition and contrast through the resultant reduction of spherical aberration. Lenses thus modified, regardless of make, are termed "Garutso lenses."

Last year several Hollywood directors of photography tested a series of Garutsos ranging in focal length from 25mm. to 150mm., and the resultant shots were spliced together to form a demonstration reel, later screened before members of the American Society of Cinematographers and other technical groups in the motion picture industry.

In the meantime, the Garutsos were attracting attention in other branches of the industry. Screen director Irving Ries, following a showing of the test reel, employed the lenses in producing a series of films for television. And when later he was engaged to direct "Three Husbands" for Gloria Films, one of his first requests was permission to use Garutso lenses in filming the entire picture. He put the problem to Frank Planer, A.S.C., who until then had never seen the lenses (and had not been present at the test reel screening for his associates at the A.S.C.).

Planer subsequently saw the reel and was at once impressed. With no time to make pre-production tests, he plunged into shooting "Three Husbands" and completed the photography in record time, using a Garutso lens for every shot, with consequent reduction in the number of camera setups necessary.

"'Three Husbands' was my basic training," Planer said after winding up the picture, and added: "I expect to do even better with this lens on my next picture."

By now, Planer's success with the lens was attracting attention throughout the industry and he was immediately signed to do two more pictures: "The Dungeon," for I. G. Goldsmith, and "Cyrano de Bergerac" for Stanley Kramer, using Garutso lenses exclusively.

Frank Planer is the first director of photography to work extensively with the lenses and to explore their fullest potentialities for major film production. Those who previously had worked with them had been limited both in time and opportunity and therefore did not uncover their full potentials.

"Perhaps the real secret to successful use of the Garutso lens lies in the lighting," said Planer. "One must avoid flat lighting and avoid diffusion. Use of

FIG. 1 — Example of great depth achieved with Garutso lens in group shot. Man in FG is three feet from camera, woman 6 feet, and man at rear, 13 feet. Filmed at f/3.2 with a 35mm. Garutso, type on letter is clearly discernible on screen.

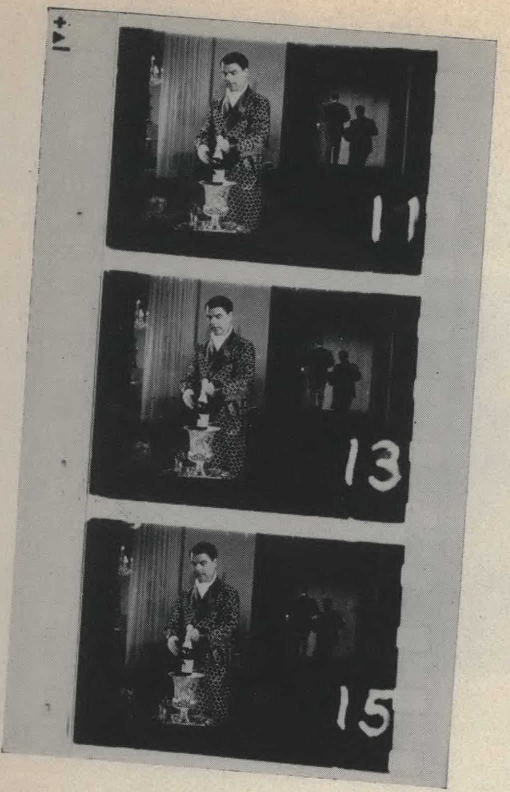


FIG. 2 — Another example of great depth of focus achieved with a 35mm. Garutso. Man in foreground is 9 feet from camera, man in distance, about 45 feet. Reproductions are from light test strips.

gauze diffusers nullifies much of the lens' potentials."

"The Garutso lens," Planer continued, "gives additional depth of focus without any hint of exaggeration, and without need for increased illumination. I work with the same key light at all times. When I do use additional light, even if only a slight amount, I am able to work at apertures f/2.8 to f/3.5, using the same key — and sometimes at f/4 with a 40mm. lens.

"Another important factor is that by gaining this additional depth of focus without need for additional light, the opportunity is widened for greatly increased photographic results in shooting scenes that include process or stereo backgrounds. The increased depth of focus inherently present makes it possible to obtain greater separation between the players and backgrounds — in other words, the players can be moved forward, away from the backgrounds, thus making it possible to light them to greater advantage and still have the background in focus.

"I think flat lighting results in bad pictures regardless of the lens used, but it is also undesirable with a Garutso. When striving to get separation and modulation in faces and in set architecture, flat lighting defeats the effort.

There are still other advantages — advantages for the director and for the members of the cast, according to Planer.

(Continued on Page 257)

35mm. Color Release Prints From 16mm. Color Originals

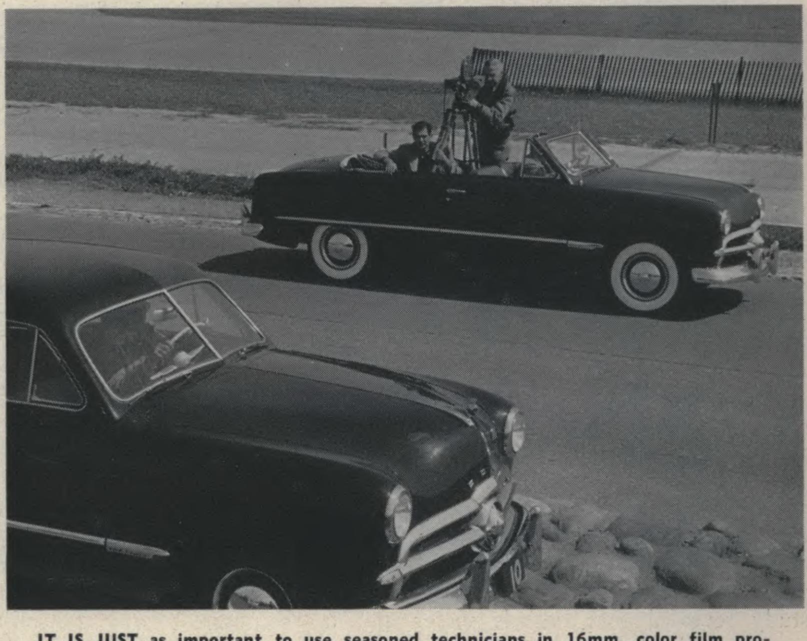
Improved techniques broaden opportunity for theatre release of films made in 16mm. color.

RECENT VENTURES in filming motion pictures in 16mm. color, then blowing them up to 35mm. color for theatrical release have proven sufficiently successful to warrant increased activity in this field. Perhaps the earliest ventures of this kind began during the war when 16mm. Kodachrome shots of battle action in the Pacific and in Alaska were blown up to 35mm. Technicolor for showing in the nation's theatres. About the same time some of the major studios began to acquire 16mm. Kodachrome footage of interesting subject matter from independent cine photographers, which they enlarged to 35mm. color and released as short subjects. The Technicolor sequences in Warner Brothers' "Task Force" were largely made up of 16mm. Kodachrome footage filmed during actual battles in the Pacific. Of the short subjects released during the last two years by three major studios, many originated in 16mm. Kodachrome.

The technique for photographing 16mm. color films for subsequent enlargment to 35mm. color and for the production of such 35mm. release prints continues to advance. Already much of the technical information has been recorded in a popular text book for cinematographers. Jackson J. Rose, A.S.C., has devoted a chapter to the subject in the new, revised edition of his American Cinematographer Hand Book and Reference Guide, as follows:

"During the last two years many producers have made feature-length films as well as short subjects on Eastman Kodak's 16mm. Commercial Kodachrome for release in theatres on 35mm. Ansco Color. The simplicity of this direct blowup color print procedure, as developed by Filmeffects of Hollywood, combined with the economy of shooting three-color productions on a low-cost 16mm. original, makes this method

(Continued on Page 248)



IT IS JUST as important to use seasoned technicians in 16mm. color film production as in any other color photography. Here veteran cinematographer and A.S.C. member Gil Warrenton is seen filming a scene in color for "The Human Bridge," produced by Raphael G. Wolff for the Ford Motor Company, and photographed entirely in 16mm. Commercial Kodachrome.

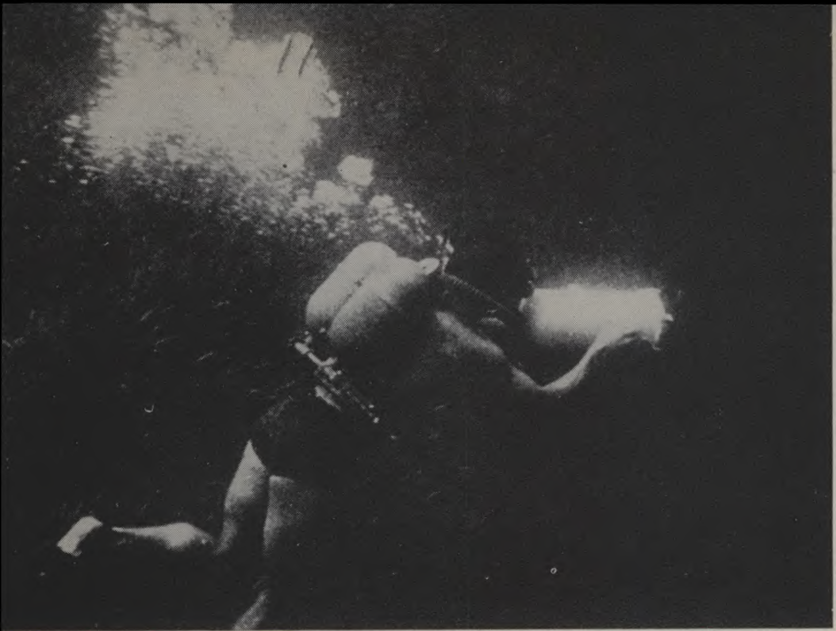
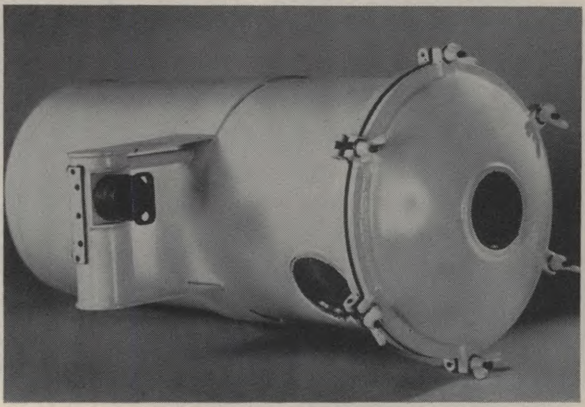


FIG. 1 — Diver-cameraman shooting movies under water, using specially-built electrically driven 16mm. camera in submarine housing. Using compressed air supply, experienced diver can remain at depth of 60 feet for half an hour. Camera has no exterior controls for lens.

FIG. 2 — View of camera housing pictured in use in photo at left. Of small bulk and weight, is made of thin steel, "parkerized" and white enameled. Spun metal dome at front is secured by six hinged bolts and wing nuts.



Underwater Photography

Data on exposure, lighting, use of filters and camera handling for underwater cinematography, result of British scientific research.

By J. B. COLLINS, B. Sc., M.B.K.S.

Reprinted from *The Photographic Journal,* Vol. 90B, 1950, Courtesy Royal Photographic Society.

REQUIREMENTS for underwater photography arise in several widely different branches of marine activity, and range from high speed cinematography for projectile study to still pictures for wreck survey and instruction. Preliminary research into the published works of other investigators showed that photography in anything but very clear water had been dismissed as impossible, and hence all previous work had been restricted to tanks (for the film industry) or to clear water regions, such as the coast of Florida and the Mediterranean. Most of the work done at sea had been in daylight using the bright summer sunlight of these regions, and had been carried out with fixed cameras operated by a helmet diver or from craft with glass ports below the water line.

Photography under water is comparable to photography through a smoke-fog. Several workers have published data on the transmission of light through various types of sea-water. One such study revealed that oceanic water approached distilled water in clarity and spectral transmission, transmitting most light in the blue and green regions of the spectrum (4,500 to 5,500 Angstrom units); but as the coastal regions are approached, the water transmission drops particularly in the blue region (below 5,000 A-Us), and wave-lengths mostly transmitted lie in the yellow and green regions.

The significance of such spectral transmission data is most appreciated when considering the use of artificial illumination under water. Among other things, it was found that a much greater proportion of the total light energy output from mercury-discharge lamps will be transmitted by sea-water than when tungsten lamp illumination is used. From charts made as result of these tests, it was noted that the transmission curves drop steeply outside the violet and red ends of the spectrum (4,000 to 7,000 A-Us) indicating that photographic systems employing infra-red or ultra-violet radiations are likely to be of little value.

The photographic work reported here was carried out off Malta, and relates to the range of water transmissions above 50 per cent per half meter. The Malta tests were conducted in 1948 to obtain more precise information on the effect of the various physical factors involved, and to study the effect of seven of these variables under daylight conditions. The seven variables, in order of importance, were: water clarity, tone of object, angle of sunlight, depth, exposure, film emulsion, and use of polarizing filters.

The trials were carried out using a gray-scale target, shown in Fig. 3, painted

(Continued on Page 254)

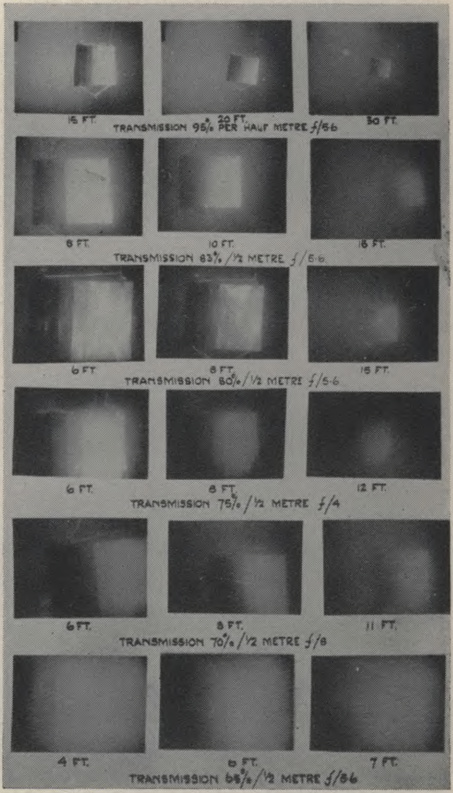

15 FT.
20 FT.
30 FT.
TRANSMISSION 95% PER HALF METRE f/5.6
8 FT.
10 FT.
16 FT.
TRANSMISSION 83%/½ METRE f/5.6
6 FT.
8 FT.
15 FT.
TRANSMISSION 80%/½ METRE f/5.6
6 FT.
8 FT.
12 FT.
TRANSMISSION 75%/½ METRE f/4
6 FT.
8 FT.
11 FT.
TRANSMISSION 70%/½ METRE f/8
4 FT.
6 FT.
7 FT.
TRANSMISSION 68%/½ METRE f/5.6

FIG. 3 — Gray scale target under conditions of varying water clarity and range. Photographed at depth of 6 feet, with light from overhead. British H.P.3 film used.

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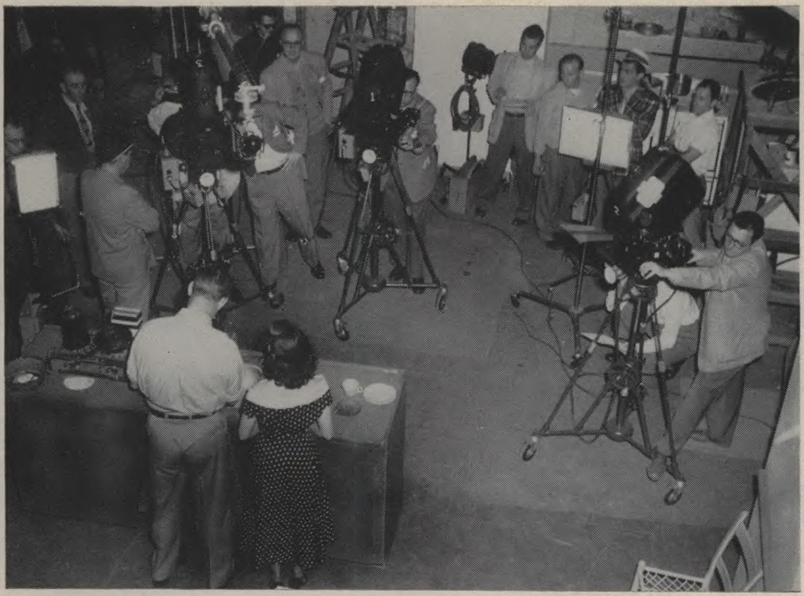
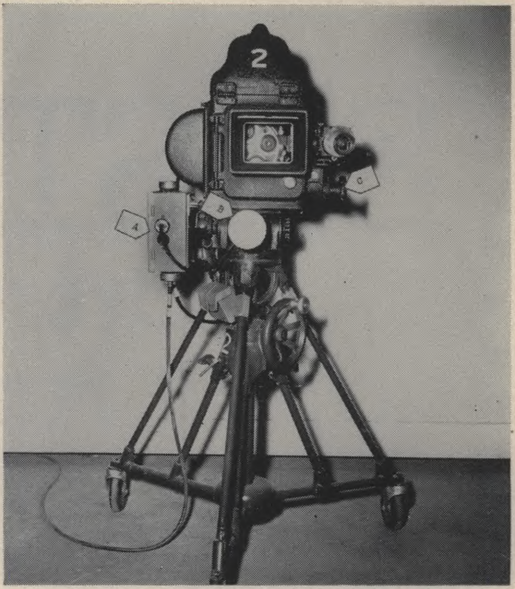


FIG. 1 — Typical multiple-camera setup for shooting television films in the Jerry Fairbanks' studio in Hollywood. Cameras film continuous action from three or more different angles, supplying variety of shots for intercutting without need for new camera setups for medium and closeup shots. Method speeds production and nets better performances by players.

FIG. 2 — Complete mobile camera unit used in multiple-camera photography. Darts A, B, and C show special features: dimmer and switch box, eye light, and focusing knob respectively.



Multiple-camera Technique For Making TV Films

System permits productions to be photographed in continuous action.

By JERRY FAIRBANKS

Executive Producer, Jerry Fairbanks, Inc.

DEVELOPMENT of a revolutionary new technique of motion picture filming has at last solved the "kinescope" problem which has plagued viewers and sponsors alike since the first "kines" were introduced. The perfection of a multiple-camera technique now makes it possible for television film producers to compete from a budget standpoint with kinescope-recorded shows.

The new technique developed in our research laboratories utilizes three or more Mitchell 16mm. cameras which operate simultaneously, filming three or more different angles of a scene and getting long, medium and close-up shots at the same time. (See Fig. 1.) The procedure is similar to the use of multiple cameras in telecasting "live" video. Heretofore, separate camera set-ups have been used to obtain the same results.

The system, which combines the best advantages of both television and film shooting, permits a picture to be photographed in continuous action, including cuts from one camera to another, thus making it possible to film some half-hour programs in as little as 30 minutes.

During the shooting of tests we have found that the new technique promises to cut previous production schedules by approximately 500 per cent. "Nocturne," a half-hour musical telecast weekly by KNBH in Hollywood, was completely filmed in a little more than three hours. "Major studio" schedules for the same type of filming would be from 10 days to two weeks. Before the development of

(Continued on Page 244)

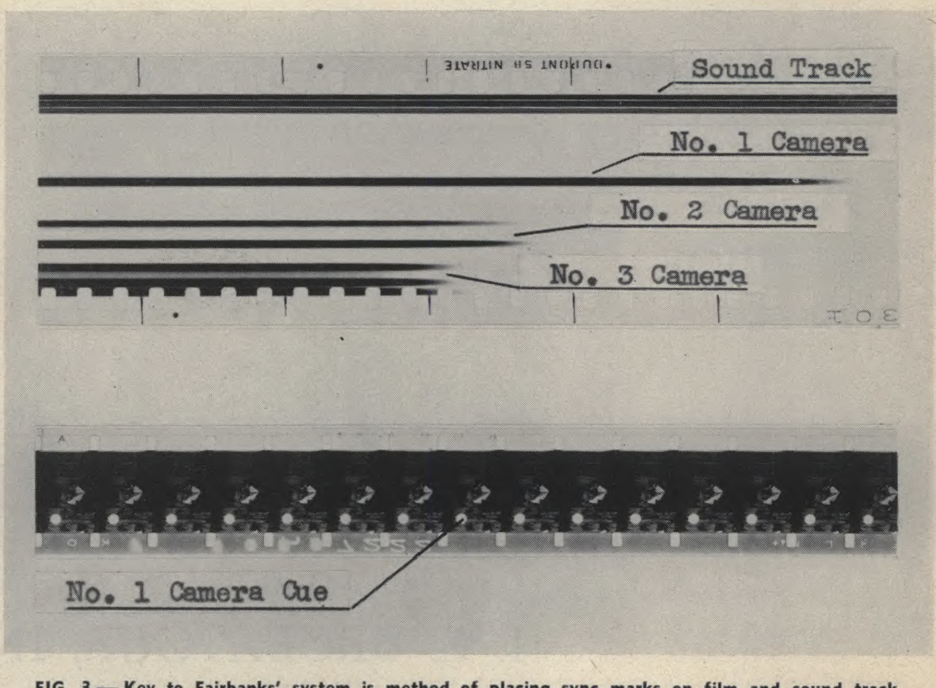


FIG. 3 — Key to Fairbanks' system is method of placing sync marks on film and sound track as aid to editing. Film shot by No. 1 camera prints single white dot first few frames after camera rolls; No. 2 and 3 cameras print two and three dots respectively. On sound track, interval of camera operation is indicated by continuous lines, as shown.

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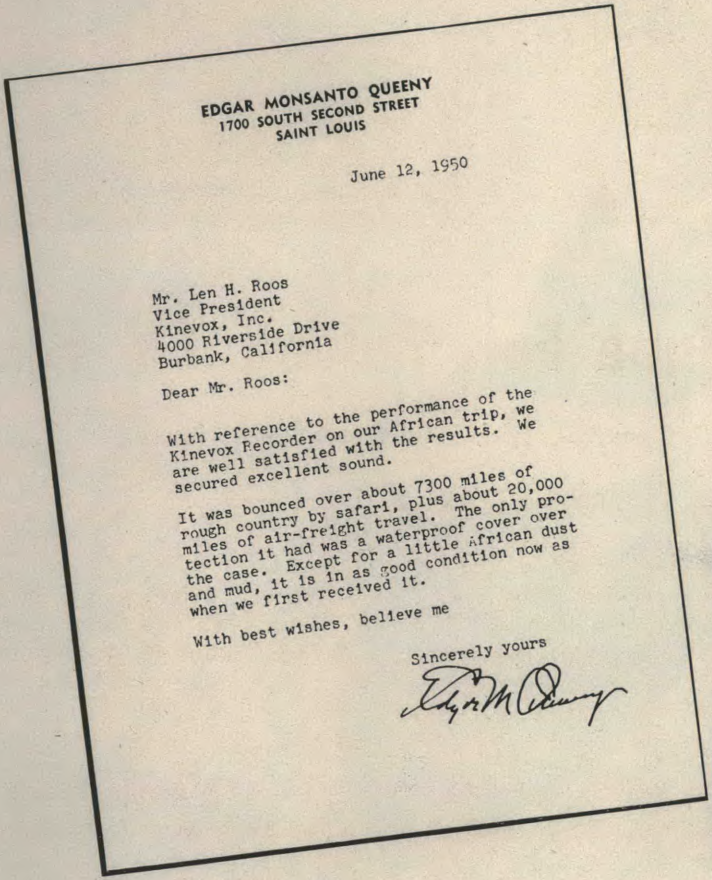

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1700 SOUTH SECOND STREET
SAINT LOUIS

June 12, 1950

Mr. Len H. Roos
Vice President
Kinevox, Inc.
4000 Riverside Drive
Burbank, California

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With best wishes, believe me

Sincerely yours

Edgar M Queeny

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INTIMATE candid shots like this are important to a movie record of a wedding. Because illumination is always a problem in shooting scenes in a church or at the reception, best results follow where a Powell-Lite is used attached to camera to furnish illumination.

AMONG the "must" shots for a wedding record film is the group shot of bride and bridesmaids — best photographed immediately before ceremony or at rehearsal.

MORE candid shots can be made at the reception. Remember to include in these scenes the most important guests and members of both families.

AND for a closing scene, a closeup of bride and groom safely inside their car as they prepare to drive away on their honeymoon.—Photos courtesy Leo and Beverly Hahn.

Filming A Wedding

Some professional angles on how to give wedding movies real "production value."

By CHARLES LORING

THE WEDDING FILM falls into a special category all its own. Far from being the usual "home movie" subject, the nuptial ceremony and attendant events are the most important in the lives of at least the two principals involved, and very significant occasions for their families. Any photographs or motion pictures made on that particular day become treasured mementos which will be viewed and re-viewed many times during the years that follow. For this reason the wedding film deserves careful pre-planning as well as the very best photographic treatment possible.

In every town there is at least one movie cameraman who specializes in making wedding films, and indeed this type of cinematography has become a very profitable sideline for cameramen who do the bulk of their work in other phases of movie-making. The cine cameraist with any ability at all can usually do a good job of filming a wedding, provided he has the right equipment and creative imagination.

The planning phase should include some discussions with the bride's mother, or some other person directly concerned with arrangements for the wedding and reception. The bride and groom (if they can be corralled long enough) should be included in these discussions, so that they will know what is required of them in order to make the filming successful. A list should be made of everything that is to happen — all in proper sequence — and another list should be made of the guests who must, for one reason or another, be included in the scenes. Where the affair is to be a large one and the guests are unknown to the cameraman, it is advisable to have someone close to

(Continued on Page 250)

Tackling Your First Ambitious Film Production

Try a documentary subject for your first scenario film; it will provide important experience in coordinating story planning with photography.

By FREDERICK FOSTER

THERE COMES A TIME in the life of every amateur movie maker when he yearns to break away from the "snap-shooting" routine of maing movies of the kids and the family, of vacation and week-end trips, and tackle something more serious in the way of a continuity film — a documentary or perhaps a modest photoplaylet.

Shooting your first motion picture from a prepared script can be a pleasurable and exciting experience. The venture is not fraught with difficulties if you have mastered your camera, know the rudiments of continuity, and have the imagination necessary to visualize your picture in advance and then see it through to completion.

Let us assume you are fairly proficient with your camera. The matter of continuity should not prove a bugaboo if you attend the movies fairly regularly and study the mechanics of the pictures you see there. You just can't help acquiring some idea of continuity technique, but your ability to apply this knowledge to your own picture making will depend on how much thought you give your picture in advance.

Any picture produced from a script requires careful planning — planning of story line, the various camera angles and other photographic treatment, the lighting of interiors, and the titles, if it is to be silent — and then putting those plans down on paper in the form of a shooting script. Actually, you'll get a great big kick out of planning then shooting your first continuity film, for here you will be approaching for the first time the movie making procedure of the professionals. You will be taking another step forward in your experience of making movies that may lead — who knows — to an exciting adventure, perhaps a career.

Because capable acting talent is pretty difficult for the movie amateur to obtain for his films, your first ambitious production will probably fare better if it is a documentary type of subject rather than a dramatic or comedy effort. Although some documentary films may require the use of actors, the number will be limited as compared to the requirements of a story film.

SHOOTING your first motion picture from a prepared script can be a pleasurable and exciting experience, once you have mastered your camera and know the rudiments of continuity.

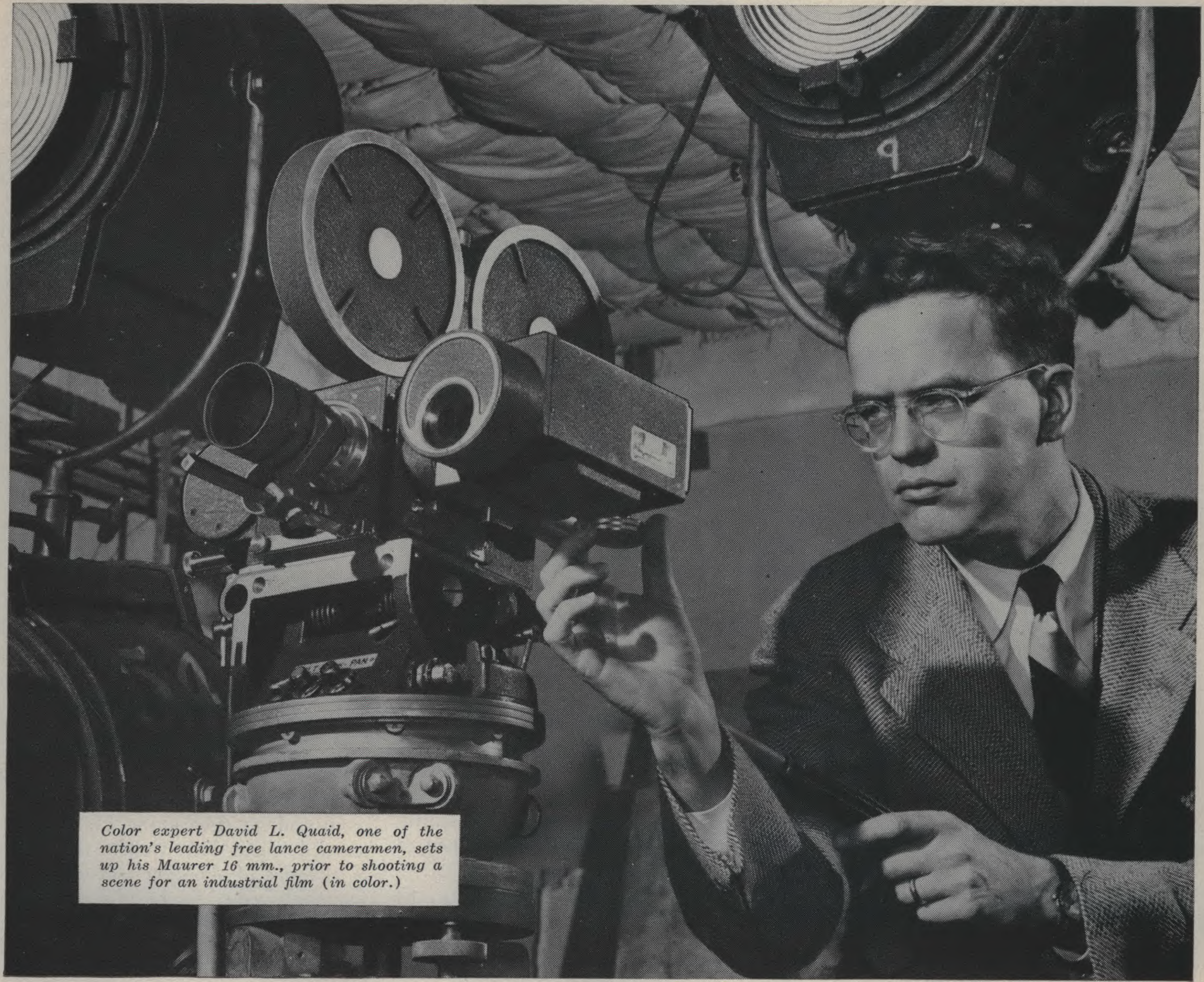
The shooting script for a documentary film need not be elaborate. In fact, it may be nothing more than a well organized scene list, but the organization of the material in proper sequence, with the scenes broken down into appropriate camera angles, etc., is most important if the best result is to be achieved.

"Live" with the subject a bit before attempting to set it down into sequences and scenes. Absorb the atmosphere of the place or the situation or the personality of the particular person to be portrayed, so that you may actually capture the proper mood. Contrary to some belief, a documentary need not be a coldly reportorial strip of celluloid; actually, the human touch is much to be desired. To further this effect, be sure to include in your scene list a generous share of reaction shots, because these are the shots that will draw the audience more closely to your subject and further their understanding of what you are attempting to depict with film.

Once the scene list or shooting script has been written, the next step is to line up the various elements of the picture. These include such players as may be necessary, costumes (if any), settings, locations, and properties. Although all this may sound like an ambitious project, it should not be so in making a documentary film, because the very nature of the film implies the recording of a realistic situation that already exists. This means that if the situation is worthy of portrayal in the first place, it is usually quite complete in its makeup and needs only minor additions for the camera.

The matter of actors is something else again. But usually, if people are photographed doing the thing that is their every-day occupation, they will execute it quite naturally and with a minimum of self-consciousness before the camera.

(Continued on Page 252)



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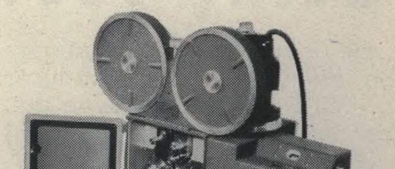

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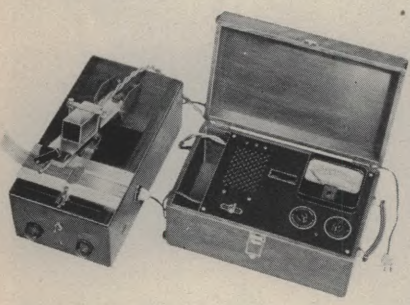

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MULTIPLE CAMERA TECHNIQUE

(Continued from Page 238)

our multiple-camera system, we would have planned on a minimum of three days to accomplish the same thing.

In perfecting the new system, we met and surmounted numerous technical problems during 26 months of research and experimentation. Among the foremost of these was the development of a marking device to "sync" picture and sound tracks.

This was necessary because the new system called for cameras to be turned on and off numerous times during the filming of long sustained scenes. The only other alternative was to let all cameras run continuously from the start, necessitating a tremendous waste of expensive negative film.

The problem was overcome by the invention of a device in each camera that leaves a "sync" mark on the action film when the camera is up to speed, identifying the camera. (See Fig. 3.) Also a similar device on the sound recorder exposes a line or lines on the sound film, indentifying the cameras in operation throughout the scene. In this manner, the sound film becomes the key to the cutting and inserting of all scenes shot by the different cameras. The marking and "sync" devices are entirely automatic and do not require cameramen to operate additional equipment.

Second of the major problems to be overcome in developing the new system was the perfection of cameras that could follow focus at all times and a viewfinder that would give cameramen the exact image in the exact focus that was being recorded on film. Equipment was especially built by the Mitchell camera company to our specifications. Finders were coupled with camera lenses so that an adjustment of the finder focus would correct for parallax and camera lens focus. In short, equipment was perfected so that if a scene is in focus on the finder it also is in focus on the film.

These developments were necessary to allow the cameramen to change focus as he moves the camera in and away from subjects or to properly film subjects moving in and away from the camera. As now perfected, the new technique allows the cameraman the same amount of freedom as the video cameraman — a freedom of movement that motion picture cameramen have never before enjoyed. (See Fig. 2.)

The 16mm. cameras are mounted on standard tripods which in turn are mounted on especially made three-wheel dollies that allow the cameraman to move the camera to easily follow the action in any direction. These new type cameras can operate in any radius or directional line. This equipment does away with the heavy metal dolly tracks and trucking equipment that often necessitated the services of four or five men.

Eyelights have been mounted below the matt box on each camera blimp to be used or not as the operator desires. Each eyelight has a control mechanism to regulate the intensity of the light so that it will match the general set lighting. Each camera blimp also is equipped with an action light so that the cast and technicians will know exactly the cameras in operation and so that the director will know if the scene is being filmed according to plan. Camera cables, in many instances, are suspended overhead in sets to eliminate as many ground cables as possible.

A radical departure from previous movie methods, the new process required the development of a much faster and more efficient stage operations technique and production system. Heretofore, the method has been to set up a tentative time table of scenes to chart the course of production. This served more or less as a guide to the construction department and set decorators. Players seldom learned their lines more than a day in advance of shooting and usually only for the scenes to be filmed. Camera angles were determined on the spot and rehearsals held while the technical crew stood by. The director was the only one who had knowledge of the master plan. In many instances, he formed only a general plan in his mind, leaving the details until the night before shooting. Technicians and cast members learned about them the day of filming.

Under our new system every detail is completely planned in advance. Sets and decorations for the entire screenplay are constructed and dressed in advance. Cast, which has rehearsed on another stage, is prepared to run through the entire story just as they would for a stage play. All lighting is ready and each and every camera movement planned long in advance on paper. One rehearsal is held on the stage. Its purpose is to give the cameramen the practice of executing what has been planned for them. The entire scene is then filmed, with the three cameras getting the various angles and long, medium and close-up shots. The average scene under our new system runs many times longer than the average scene photographed under the old method. Rarely is the footage under five minutes and seven to eight minutes is the average. In some instances,

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MEYER PRIMOTAR, 30mm f/3.5	$ 45.00
COOKE, Cinema. 47mm f/2.5	$110.00
EYMAX TELEPHOTO, 10″ f/4.5	$110.00
DALLMEYER, 10″ f/5.6	$140.00

16MM AND 35MM EQUIPMENT

POLOROID VARIABLE FILTER, 3″ diameter in leaf-type mounting bracket........$3.50

PORTABLE REFRIGERATED FILM STORAGE VAULTS, capacity 9 cubic ft. 30″ x 60″ x 36″. 110 volt 60 cycle, complete with compressor and motor........$250.00

TEMPRITE DEHUMIDIFYING FILM DRYER, drys at 4′ to 8′ per minute; two H.P. refrigeration unit, 110-220 volt 60 cycle. 38″ x 24″ x 82.″ New. $775.00

BELL & HOWELL EYEMO IDENTIFICATION RECORDER AND TITLER, 35mm. Facilitates titling and identification of film in the field or on location. New. $6.95

SCENE IDENTIFICATION SLATES, with rotating numbers $2.75

EYEMO CARRYING CASE, for Model K or Model Q (specify type when ordering). $12.50

SIMPLEX SOUND PROJECTOR, 35mm sound projectors and rectifiers, Model SP. Projection lens, B & L 5.5″. Per pair........$1100.00
(Many other types of Simplex, Holmes, de Vry, Bell & Howell, Ampro, Victor, RCA, and other 35mm and 16mm projectors in stock.)

ASHCROFT ARC LIGHTHOUSE (THEATRE MODEL SUPREX), 30 to 65 amps with 14″ glass reflector, per pair........$175.00

STRONG ARC LIGHTHOUSE (THEATRE MODEL). 15 amp. per pair........$150.00

FILM TRANSPORT CASES, vulcanized fibre, with reinforced corners, New:

16mm x 800′	$ .98
16mm x 1600′	$1.98
35mm x 800′ (Steel)	$1.45

PROJECTION SCREENS: A complete line of beaded and plain screens with and without stands. Quotations on request.

MOVIOLAS, 35mm., Model D, complete, new $195.00

Write us for description and quotations on Mitchell viewfinders, Mitchell motors, and Mitchell matte boxes.

ANIMATION STANDS

ACME ANIMATION STAND. Completely rebuilt $2500.00

ROTOSCOPE PROJECTOR, Acme,........$1800.00

TRIPODS AND DOLLIES

AKELEY GYRO TRIPOD. Standard height, with bowl. For heavy cameras........$125.00

AKELEY STANDARD TRIPOD AND HEAD, with friction control for pan and tilt, standard height, complete. For heavy cameras....$185.00

AKELEY STANDARD TRIPOD. Standard height, less head. For heavy cameras........$85.00

AKELEY BABY STANDARD TRIPOD. Less head. For heavy cameras........$85.00

AKELEY BABY GYRO TRIPOD. Less head. For heavy cameras. $85.00

MITCHELL TRIPOD, Standard height, less head. For heavy cameras........$125.00

FEARLESS TRIPOD. Standard friction freehead, ball-type for smooth pan and tilt. For Craig type, heavy cameras. $280.00

RIES TRIPOD, Model A, standard height, friction control for pan and tilt........$65.00

PROFESSIONAL HI-HATS. Mfg. by Camera Equipment Co. New $12.50

MAYFIELD TRIPOD. Standard height, all metal, telescoping legs. New. $12.95

MAYFIELD TRIPOD HEAD. Friction control for pan and tilt, single control. New. $7.95

DIETZGEN TRANSIT TRIPOD. Suitable for heavy-duty camera tripod. Can be converted with very slight changes........$15.00

SALTZMAN TRIPOD DOLLY (MODEL 500 M.B.T.). Heavy-duty. Collapsible extensions extend from 20″ to 36″ spread. Mounted on ball casters. Three leveling screws for locking dolly in position. New........$34.50

Write for information on new and used B & H tripods.

FILM DEVELOPERS

PATCO 16mm or 35mm x 200′ capacity, 110 volt 60 cycle motor driven. Complete with motor, three stainless steel tanks and reel assembly. $65.00

MORSE G-3 8mm, 16mm or 35mm x 100′ capacity, manually operated, daylight tank. All processing and reversal operations in one tank $18.50

CAMERA EQUIPMENT COMPANY DAYLIGHT TEST STRIP DEVELOPER vacuum bottle solution tanks (3 each), adapter for attaching Mitchell or Bell & Howell 35mm magazines directly to change box; arm sleeves for readily processing test strips........$29.50

HOUSTON K-1A (SIMILAR TO MODEL 11) 16mm automatic film processing unit. Each step controlled for proper exposure and solution temperature; self-contained unit requiring no extra equipment; processes black and white, negative, positive or reversal at speeds up to 20′ per minute........$2,950.00

HOUSTON K-1A, same description as above, in "as is" condition........$1500.00

HOUSTON 35mm FILM DEVELOPER. Complete film processing unit, the standard of all 35mm automatic developing outfits. Processes black and white, negative, and positive at speeds up to 20′ per minute........$5.950.00

DEEP TANK for processing 16mm or 35mm film, two racks per tank, accommodates 200′ of film each; Grade 1 select Cypress........$35.00

FILM DRYERS

STINEMAN 16mm or 35mm collapsible drying rack; 4′ x 4′ set up; capacity 200′. Ambient air dryer. New........$8.50

MORSE A-8 (M-30) for 8mm, 16mm or 35mm x 50′ capacity. Hand-operated by winding film onto areated collapsible reel. Ambient air dryer. Complete with carrying case........$16.50

EDITING AND VIEWING EQUIPMENT

BELL & HOWELL 16MM FILMOTION EDITOR. Capacity 2000′. 115 volt AC. Complete with splicer, scraper, two-speed rewinds, power cord, and fitted case........$85.00

BELL & HOWELL 16MM COMBINATION VIEWER AND PROJECTOR. Portable unit with built-in daylight viewing screen 12″ x 12.″ Can be used as standard projector........$85.00

GRISWOLD SPLICER, 35mm, B-2. New $14.95

KODASCOPE MASTER EDITOR WITH CINE KODAK EDITING VIEWER, Model B-16 for 16mm film. 2000′ capacity, animated viewing screen $43.50

DUPLEX REWIND, 35mm x 200′ capacity with free-wheeling gear train. New. Per each....$4.75

All equipment not listed as new is fully reconditioned and guaranteed. California purchasers please include 3% State Sales Tax. All quotations f.o.b. Mail orders filled immediately upon receipt. Cashier's check or M.O. with order. Please include 25% deposit with C.O.D. orders. Financing available if desired.

Teletype: DAC

(More Coogan Specials on Page 248)

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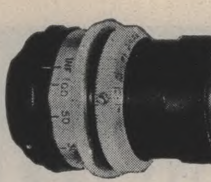

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F:2.3

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- A new six element high quality lens for the 16 and 35mm. film camera. Corrected for all aberration at full opening, giving highest definition in black-&-white and color. Made by skilled technicians with many years of optical training.
- Fitted to precision focusing mount which moves the lens smoothly without rotating elements or shifting image.
- This lens comes in C mount for 16mm. cameras. Fitting to other cameras upon special order.
- Sizes available now: 35 and 50mm. uncoated and 75mm. coated.

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when a minimum of sets and complicated action is called for, 30 minutes of finished film can be shot in 30 minutes.

Key to the entire stage operations technique is a set of "production scripts" prepared for every technician and player. These script layouts outline in detail every camera movement and cues for cutting in and out of scenes. Each camera is designated with a number and color to identify any particular camera and its position and field of coverage. Cameramen and technicians study their "scripts" in advance just as thoroughly as do the players. When individual cameramen receive layouts covering only their own schedule of operations, the director and cast are given a master "production script" that shows the plan for the three or more cameras. Relative markings in the story script also show the cameras that will be in operation at any particular time in the story continuity.

Lighting of sets always has been an important factor in production time. Average major studio time for standard lighting runs from 30 minutes to more than an hour per set up. Lighting under our new system averages less than five minutes and in many instances there is no loss of production time at all as every set is prelighted. The time-saving factor here added to the time gained by shooting only long, sustained scenes totals a huge saving in cost — a saving we can pass along to the sponsor.

The development of our new lighting technique also required many months of experimentation. The problem was to perfect a means of lighting a set so that no matter where the actors moved the light would be uniform. At the same time, it was necessary to devise a system that would practically eliminate cables from the stage floor. This was a "must" because our system requires the quick and easy movement of camera and sound boom equipment during shooting.

Our main lighting system, as it has been developed, consists of banks of 300-watt reflector lights. These banks are hung so that the tilt and swing adjustment can be made from the floor. This method makes for speed in giving an even, overall illumination of the set, and when properly used, without dark or hot spots.

Back and effect lighting is handled in standard studio procedure with incandescent spotlights mounted on parallels. Once these are adjusted, they remain the same throughout shooting of the particular set. Smaller banks of reflector lights are used on the floor for side lighting. Cables for lamps and all electrical equipment are suspended.

We also use the floor as an aid in our lighting. A very light colored floor covering suitable to dolly on is used to help eliminate chin, nose, and eye shadows. Where the floor is in the picture in long shots, rugs of course, are used. The combination of this flooring and bank lighting gives an overall modelling that is photographically pleasing. It eliminates the unflattering shadows that live television lighting seems to accentuate. It also does away with the accentuated makeup that is often used in live telecasting.

Sound recording, with the exception of the "sync" marking system, offered no major problems, fortunately. Multiple recorders are used in the filming of long shows, saving the expense and work of developing larger magazines. Regular studio sound equipment, with a few innovations of our own, is used. Additional microphones are spotted overhead out of camera range to obtain complete coverage of the entire set.

Cast rehearsals, without camera and lighting equipment, are held on a non-shooting stage with similar props and furniture available. This prevents the tying up of the main sound stages and the expensive equipment located there. Here the director works out all his "business" and the cast familiarizes itself with the dialogue and action. While rehearsals are thorough, they are not as demanding as those necessary for a live show which involves working under lights and with cameras.

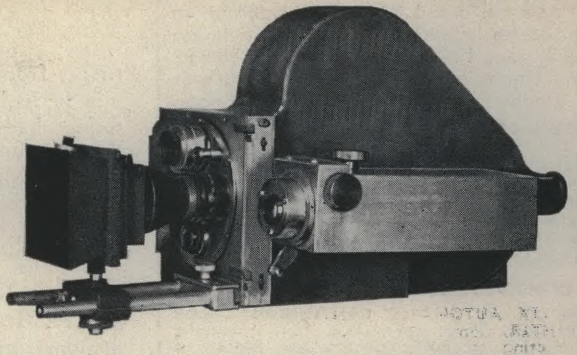
Our new technique also was perfected for the filming of live programs *simultaneously* with the actual telecast of the show. Special 1200-foot magazines were developed for our cameras, and Eastman Kodak company prepares special 1200-foot negative film rolls to our specifications for this type of work. Ours is the only motion picture company to date to order film of such length. An intercommunications system has been built so that cameramen can receive instructions in much the same manner as a live video camerman. This system also is available to us during filming on our stages; tests, however, have proved that the "production script" method accomplishes excellent results and that earphones are unnecessary during stage shooting.

Quality in all our tests is as good as in any motion picture. Test prints have proved that the system provides far superior lighting, sound and clarity of picture than the best kinescopes made to date. We have proved this beyond a question of a doubt several times by alternating in a sample reel footage from one of our tests and footage from a kinescope of the same show. The difference is startling, especially when seen on a closed circuit.

The ultimate aim of kinescope recordings is to obtain a quality comparable to film. Realization of this goal is still many years away and current kinescoping leaves much to be desired. Even when kinescopes are perfected, they'll not be as acceptable as film, for photographing from a tube of 525 lines is similar to photographing a newspaper cut. Imperfections in the cut (and electronic lines of the tube) always will be transferred to the copy.

This new method of making TV film does away with all the objectionable features of kinescopes and makes it possible for a star to do an entire series in a short period of time, not tying him to a regular weekly schedule. The show can be filmed in Hollywood, Chicago, or New York at a time convenient to the actor and can be released whenever the sponsor desires. Not only is the actor's appearance protected, but so is his performance. Retakes always can be made if necessary. Furthermore, our technique catches all the spontaneity of live video because the players go through the story in much the same way as they would for a stage play.

By pre-planning every move, streamlinging stage operations techniques and miniminizing waste footage and coverage, shooting time is cut many times below what formerly was thought possible.



The NORD

A completely NEW 16mm. Professional Camera

THE WRAPS ARE OFF! A new professional 16mm. camera with radically new features important to every commercial, educational and television film producer. The NORD insures top photographic results under most adverse filming conditions. The result of five years of careful research and development, this camera has all the desirable features you require including:

- New type intermittent for rock-steady pictures plus perfect precision registration so important for multiple exposure work. Movement cannot perforate film, is self-engaging. To thread camera, merely place film in raceway, close gate and turn camera over. Feed finger finds perforations automatically.
- Rack-over devoid of structural weaknesses. No dovetails. Permanent alignment with no adjustments. Rack-over completely sealed in camera—a boon to location use.
- Direct focusing and lineup through the "taking" lens. No ground glass obscures detail. Gives brilliant erect image of full field, magnified. Focusing microscope for critical examination of image.
- 240° shutter insures lighting economy—two lights do work of three.
- Removable aperture plate insures "whisker-free" frame lines.
- Priced under $2,500.

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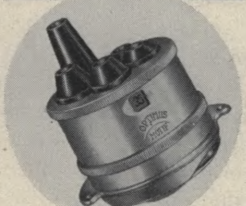
COLOR PHOTOGRAPHY

OPTIMUS MOTIF

Precision Optical Viewer for use in production of motion pictures.

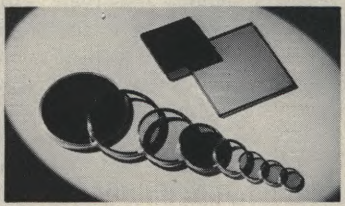
PRICE $97.50

Containing five viewing lenses which match the five standard lenses used in motion picture cameras (28, 30, 40, 50, 75mm), the Optimus Motif provides instant, overall scanning of the scene exactly as seen by the camera lens. Positive click stops and the milled ring on the instrument make it simple and easy to use. An optical adjustment is provided to compensate for varying degrees of eyesight.



C T COATED FILTERS

Mounted between optically flat glass, these Color Temperature Filters are low-reflectance coated for minimum light loss and freedom from flare. They are now available in a full range of sizes and a complete series to raise or lower color temperature by any desired amount.



COLOR CONTRAST VIEWING GLASS

This 2% density optical viewing glass, shows the highlight and shadow details of scenes exactly as reproduced on color film. Changes in illumination of subjects to be photographed may be made as indicated by the use of this viewing glass.

PRICE $2.95 plus excise tax

Panchromatic Viewing Glass for black and white film—$2.95 plus excise tax

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COOGAN SPECIALS!

We are proud to offer, in addition to the items listed below, and in our larger ad on page 170, a complete line of 16mm. and 35mm. negative and positive stock at a fraction of prevailing market prices.

NEUMADE STRIPPING FLANGE, 10" diameter with brass hub. New....$4.50

NEUMADE FILM MEASURING MACHINE 35mm Model M-37-S. single hub. New....$24.50

NEUMADE COMBINATION FILM SYUCHRONIZING MACHINE, 35mm and 16 mm. Model M-38-S $75.00

NEUMADE FILM WAXER, 35mm. New....$17.50

CONTINUOUS AND STEP PRINTERS

DUPLEX AUTOMATIC CONTINUOUS COLOR PRINTER, 35mm continuous, fully automatic correcting for both quantity and quality of light; dual units on single stand; each head a unit in itself printing up to a total of 120' per minute. The unit will handle up to 80 scenes of 100' of film; any monopack color film may successfully be printed with this unit. Like new. Quotations on request.

BURCHELL CONTINUOUS PRINTER, 35mm printer used for continuous contact printing on paper. Unit is in self-contained case with light intensity control $85.00

STEP PRINTER, with Geneva movement $75.00

STUDIO LIGHTS

STUDIO LAMP, with large 22" diameter chrome reflector on adjustable collapsible stand; focusing mount for bulb, complete with cables and scrims in fitted case....$35.00

OTTO K. OLSON CRECO, 2000 watt Mogul Bi-Post base 18" spotlight, less fresnel lens. $28.50

BARDWELL-McALISTER STUDIO LIGHTS with casters and floor pins. Three fluorescent light heads, each bank holdssix fluorescent lamps, banks swing 360°, center bank can be raised vertically 15'. $69.50

We also have arc lamps in 40, 80, 90 and 170 Amp. high-intensity, 5000 and 10,000 watt Sunspots, and other Bardwell-McAlister, Mole-Richardson and Kleigle lamps of all descriptions.

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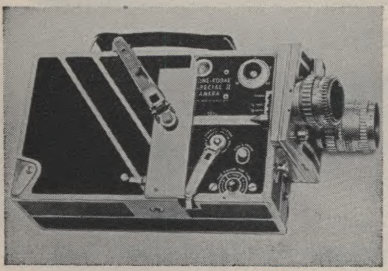
Reels, 16mm x 400 ft., used	35c
Cans, 16mm x 400 ft., used	35c
Reels, 16mm x 800 ft., used	89c
Cans, 16mm x 800 ft., used	89c
Reels, 16mm x 1200 ft., used	98c
Cans, 16mm x 1200 ft., used	98c
Reels, 16mm x 1600 ft., used	1.19
Cans, 16mm x 1600 ft., used	1.19

See Our BIG AD on Page 245.

THE COOGAN COMPANY
3729 No. Cahuenga • North Hollywood



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CINE-VOICE DEMONSTRATED FOR A. S. C.

(Continued from Page 232)

turret front accommodating three lenses may be had at slight additional cost. The sound channel is compact and sufficiently light in weight to allow it to be carried easily along with the camera. For traveling, camera, amplifier, mixer, etc., fit into one compact carrying case.

Charles Short, who did the photography on the A.S.C. demonstration reel and Al Brown, who handled the sound demonstrated the ease with which a crew of two can make professional motion pictures with this Auricon equipment. Before a critical audience of the industry's top directors of photography, subsequent screening of the film revealed excellent pictorial results — a steady picture with sharp focus throughout every scene. The sound, from a technical standpoint, was perfect.

Contributing also to the success of this innovation were the Color-Tran lighting equipment furnished by Tom Hunt, and the fine titles by Telefilm, Inc. Cine Craft laboratories' fast processing gave many of those present their first demonstration of results of this new film finishing technique, which has made possible the production of speed films for television such as newsreels and racing results.

The Film, titled "American Cinematographers On Parade," will again be screened for A.S.C. members at the Society's July 17th meeting.

35mm. COLOR PRINTS FROM 16mm. COLOR ORIGINALS

(Continued from Page 235)

highly attractive to producers who require limited numbers of release prints for their particular markets, and to whom costs are of paramount importance. The overall savings are appreciable compared to the cost of working in any other 35mm. three-color medium. Additional charges incidental to photographing in 35mm. three-color, such as raw stock, laboratory processing, shipping and equipment costs, might well determine the difference between profit and loss on some productions.

"Another use for direct blowup theatre prints is for the industrial and documentary film market. As a rule producers in this field work exclusively in 16mm. color, and their films are exhibited to 16mm. non-theatrical audiences. Occasionally, however, there will be a need for a few 35mm. color prints for special "showcase" showings in theatres and large auditoriums. Inasmuch as intermediate film steps are not necessary before the first print can be made, even a single print may be ordered without incurring the usual costly preparation work.

"Filmeffects of Hollywood has found the Ansco Color 732 raw stock to be ideally suited to the making of 35mm. three-color theatre prints directly from 16mm. reversal color originals. The 732 stock is exposed in an optical printer, enlarging from the 16mm. color original. The sound is printed from a 35mm. direct-positive sound track and the film is processed and waxed, and is then ready for theatre projection. In this manner, a three-color image can be transferred from a 16mm. original directly to a 35mm. theatre print in one step. There are no intermediate films involved, no registration problems, and the prints can be made at the rate of thirty to sixty feet per minute.

"For many of the producers using the direct blowup release print process, it is their first attempt at making a film in color. Shooting in 16mm. sometimes misleads to further economy, particularly in the selection of equipment and technical personnel. Such economy is false, and can be quite disasterous when the film must compete in the theatres with original 35mm. pictures. The smaller size and the comparatively low cost of 16mm. film should not lead the producer to believe that other requirements have been reduced proportionately. As in all color processes, the quality of the release print depends a great deal upon the perfection of the original photography. A poorly photographed scene in black and white can often get by because its deficiencies are recorded only in tones of grey. The same scene photographed poorly in color will usually stand out badly as a glaring misrepresentation of reality.

"The cameraman must pay particular attention to lighting contrasts, color values, and exposures. Also, filming in color causes the problems of makeup, costuming and set decoration to grow in importance. All of these arts become increasingly vital factors to be considered in striving for photographically smooth 35mm. color theatre prints.

"Cameras and accessories must be selected with great care. Excellent 16mm. professional equipment, with critically sharp lenses, is now available. This equipment is of standard design and can be used in conjunction with most other existing studio equipment, with little change in operative technique required. Most of the difficulties encountered by cameramen shooting color for the first time arises from insufficient knowledge of the limitations of the particular material they are using. For this reason, it is just as important in 16mm. to use seasoned technicians as it is in any other color photography, regardless of the size or type of film used.

"Editorial work can be carried out in several ways. If desired, a 16mm. color work print or a black and white reversal work print can be made. For 35mm. producers, perhaps the handiest method would be to use a 35mm. black and white work print, which allows for editorial and dubbing operations to proceed in conventional fashion, utilizing standard equipment. Edge numbers from the 16mm. color original can be transferred to the sound track area of the 35mm. work print during the procedure, making the matching of the original color a comparatively simple job. Great care should be taken in handling the original film, as the slightest abrasions or scratches are greatly magnified in the 35mm. blowup. The best of major studio negative cutting procedures should be prac-

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Inkie and Arc Lamps including Required Accessories
Generators—Cables—Boards—Boxes

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Raby Camera Crane—Dollies—Blimps—Geared Heads

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Parallels—Steps—Platform Ladders
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COLOR PHOTOGRAPHY

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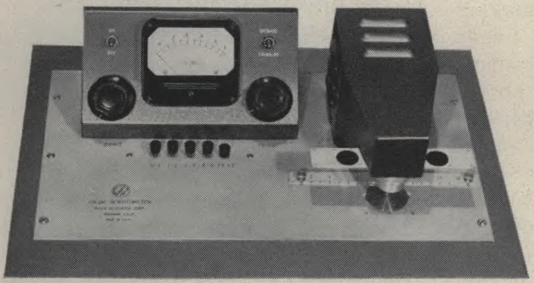
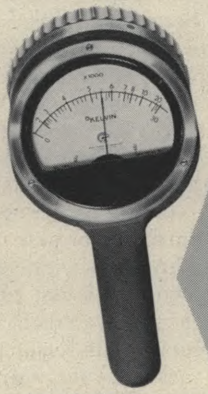
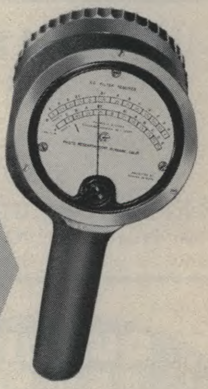


The P.R.C. Color Densitometer is a precision instrument which will do anything other transmission type densitometers will do, but in addition will measure with equal precision the density at any point in the visible spectrum of color film or any other transparent colored materials. Used by leading color film processing laboratories.

SPECTRA

Color Temperature Meters





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complete with Spectrasphere, handstrap and carrying case

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The First Direct Color Temperature Meter for instant direct color temperature readings of both natural and artificial light.

STUDIO MODEL

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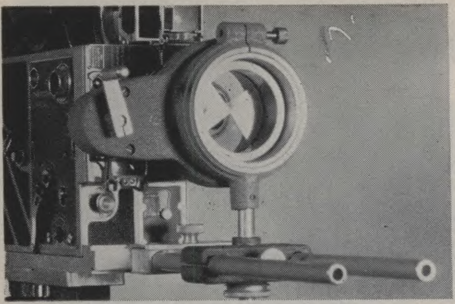

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ticed to the letter, in order to insure a cleaner, scratch-free original.

"When a great number of lap-dissolves are desired in a release print, the original is generally assembled in A and B rolls. (See article on this subject in the April, 1950, issue — page 126.— Editor). This arrangement permits the dissolves to be made each time while printing directly from the camera original. If the optical effects are few or involved, dupe sections incorporating the effects can be cut in with the original. Corrections are made semi-automaticaly, where necessary.

"Thirty-five millimeter Ansco Color printing masters can also be made from the 16mm. original, for making theatre prints by contact. For this work Ansco 735 camera stock is generally used. The color quality of the prints made from such masters, even if the original has been masked, is not as satisfactory as those enlarged directly from the original. This, of course, is due to the fact that the print from the master is one generation further away from the original than the direct blowup. However, when a great number of prints are required, there is a saving in cost, which may be worth the color loss to some producers.

"The Acme-Dunn optical printer used by Filmeffects of Hollywood in making the Ansco Color blowup release prints features a 16mm. projector head equipped with a Bell & Howell type shuttle movement. This movement is fitted with two register pins placed side by side to accommodate double perforated originals, or they can be re-set one above the other for single perforated film. The 35mm. camera head is also of the Bell & Howell type, with a positive-matted aperture and a variable-opening shutter for the making of fades and dissolves. The light source is a 750-watt projection lamp fitted with a highly efficient condensing system. Provision is made between the lamp house and film for diffusion screens and color-correction filters. Lenses used are the four-inch f/4.5 Cooke Copying and the four-inch f/2.8 Eastman Printing Ektar.

"The sound track required for this process must be a 35mm. positive image in negative position, generally obtained by re-recording to a direct positive. The exposed print is then processed by the laboratory, using Ansco Color 732 release positive stock. During the processing, the sound track area is sulfide coated to render the unexposed areas of the dye track opaque."

FILMING A WEDDING

(Continued from Page 241)

the family assigned to him as "technical advisor" to properly identify his cast of characters.

The film will fall naturally into two sequences: the wedding itself, and the reception. Where the church is a pictorially attractive structure, start by making a long shot of it. A similar shot might also make an ideal background for superimposing a title. This scene need not be filmed on the day of the wedding; it can be shot before or after that date, whenever shooting conditions are most ideal. In case the church happens to be an unattractive building, or if it is located in a section of town that is not particularly photogenic, select one attractive feature, such as the doorway, and use it for identification. Or shoot your scene of the church on the day of the wedding so that the festivities themselves can add interest to the scene.

Photography of the wedding ceremony inside the church presents some unique problems, which are often impossible to solve. The main problem, of course, is one of getting enough light on the subject. The average church does not have a great amount of natural light coming through the windows, especially if they are of stained-glass, but the light level may be sufficient provided fast lenses are used along with a high-speed black and white film. Photographing in color, of course, will demand a great deal more light; also one must always consider the matter of color temperature.

It is the personal feeling of many people that floodlights installed in the church for filming a ceremony distract from the sanctity of the occasion — and indeed this has a lot of truth. But with the new mushroom-type floodlights and reflector-spotlights it is sometimes possible to hide clamp-on lighting units behind pillars, draperies, etc., and thus achieve a light level sufficient for photography. Where such units are used to boost the daylight level for color photography, they should have light blue filters in front of them so the color temperature will be consistent with that of daylight.

Where it is possible to conceal lighting units in the church, there still remains the hazard of overloading circuits. Therefore it is wise to check with the maintenance man to determine how heavily fused are the church circuits and how best to use the current available.

This problem can be greatly minimized if one or more of the portable transformers now on the market are used to boost the existing current. In any event, be sure to check all details concerned with lighting before proceeding to set up your lighting units. In this way, you will avoid embarrassment to yourself as well as to the families of the principals.

The sequence at the church should include exterior shots of the guests arriving and chatting with each other prior to entering the church. Be sure to get some shots of the inevitable group of guests awaiting arrival of the bride. It will especially enhance the picture to get some shots of members of the families, starry-eyed with expectancy as they await the beginning of the ceremony.

Let us assume that it is possible to film some scenes of the ceremony inside the church. In such event, set the camera fairly well back from the pulpit, preferably on a balcony or rear choir-loft, so that the camera noise will not disturb the ceremony. It is advisable to have at least three lenses of varying focal lengths, so that you can flip from one to the other and thus lend variety of composition to such one-position camera shots. Try to gauge your filming so that you will be able to capture intimate closeups at the most meaningful parts of the ceremony. In order to avoid wasting film on the more routine parts of the ceremony, it is advisable for the cameraman to attend the rehearsal and take notes of the high points.

Very often church windows are so placed that brilliant patches of sunlight will fall upon parts of the interior, while the other areas remain in shadow. Where this is encountered, try to frame your compositions so the underlighted areas are excluded, and so you may open your lens wide enough to give sufficient exposure for the action itself. Where it is just plain impossible to shoot footage inside the church, try to secure some good still pictures of the ceremony afterward and photograph them later in a titler.

As soon as sufficient footage of the recessional has been secured, make a quick exit and be prepared to film the action which follows the ceremony. This will include scenes of the principals leaving the church and getting into their cars; the guests talking to each other and to the families of the bride and groom; and occasionally other human-interest scenes which should be included. Special effort should be made to get shots of the families' reactions to this particular moment, as these are the scenes that will be so meaningful in years to come.

The reception is the second important sequence and one which poses its own peculiar problems — namely those of

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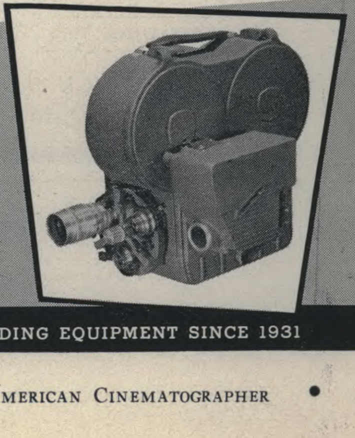

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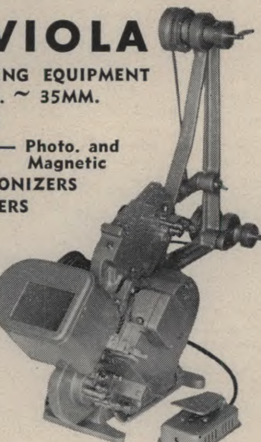

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In our advertisement on page 208 of the June issue of The American Cinematographer, the Mole-Richardson studio dolly was erroneously priced $895.00. The correct price of this item is $1,345.00.
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lighting and of keeping the guests from trampling the cameraman and his equipment. The lighting problem can be a real headache if the reception is held in a private home, since there is the matter of current for lamps to consider, as well as the placing of lights in positions where they will not be knocked over or pulled loose from the wall plugs. Here again, it is best to arrange clamp-on units, making sure they and the attached cords do not become a hazard in the presence of the milling throng of joyous people.

As far as subject matter here is concerned, the "must shots" include the reception line with suitable closeups, cutting of the cake, tossing of the bridal bouquet, the kissing of the bride, and various intimate closeups of members of the wedding party. The latter are very important, because in years to come, the bride will surely want to remember with fondness those who were her attendants on the happiest day of her life.

The film should conclude with the inevitable shots of the bride and groom in traveling clothes, leaving on their honeymoon. If the car has been decorated with any special kind of trimming, get several closeup shots. Then you will have to be especially alert to get a number of scenes of the couple leaving, entering the car, and driving off. You will want to capture the happy hysteria of that last minute departure, including the closeups which will add special zest to the sequence.

It is always nice to make up a special set of titles to augment movies of a wedding. These may be printed or hand-lettered on suitable stock, along with sketches, cartoons, or still pictures representative of the affair. If you can make a nice shot of the church, a closeup of church bells tolling, or a closeup of the bridal bouquet, superimpose on such scenes titles which have been lettered on a black card and then double-exposed on the original scene.

The wedding film, we repeat, is in a class by itself. Whether you undertake the assignment as a personal favor to a friend, or as a remunerative avocation — remember that it is a very special movie, one that will bring happiness to at least two families and their friends for many years to come.

TACKLING YOUR FIRST AMBITIOUS FILM PRODUCTION

(Continued from Page 242)

On the other hand, there are some situations the physical requirements of of which are such that it takes a fairly competent actor to give a performance that looks casually realistic. In such a case, it is better to draw upon your local "little theater" group or the drama department of local high school or college in order to obtain people accustomed to acting, and who can achieve the result required without need for too much direction.

In the actual filming of the subject, suit your camera treatment to the situation. Until recently, the word "documentary" was used euphemistically to describe poor photography, but there is no reason why a realistic photographic approach must be technically poor. While one would not want an overglossy camera treatment sugared with backlighting and reflectors, there is no reason why the lighting should be flat and undramatic, or why the camera approach should be devoid of interesting angles. Somewhere between the stark newsreel style and the "arty" approach is a happy medium particularly well suited to the treatment of documentary subjects.

Lighting for the documentary film should simulate source wherever possible. Here again, simplicity is the keynote. Simple lighting units such as mushroom-type reflector photofloods in clamp-on sockets are ideal for shooting interiors. In lighting your sets, establish the key light in terms of the natural source of illumination. For documentary subjects, it is best not to use too much fill light because this tends to subdue the dramatic effect which is achieved with a less balanced light.

Action patterns in the documentary subject should be kept simple and direct. where an actual situation is being reenacted, rehearsals are advisable so that all awkwardness of movement may be eliminated when time comes to film the scene. Occasionally, it is necessary to film actual situations as they occur. In such cases, a simple style of newsreel technique may be used, provided that a variation of angles is brought into play. Where a camera at the scene would be distracting to the subject, it will be necessary to work from a concealed vantage point. Nearby buildings with windows may be utilized, especially if the camera is equipped with telephoto lenses for securing close-ups. Where the action is, by its very nature, repetitive, film several takes with different lenses, which may be inter-cut for variety.

Editing of the documentary film should be done according to the sequence outline in the script. Here again, reaction shots will do much to draw the audience into the mood of the picture, and make the treatment more subjective. Such scenes also serve as cut-aways to cover lapses in time or action. The style of editing will necessarily vary, depending upon whether the film is to be silent with titles, or if sound is to be added later. A more rapid pace of editing may be followed in cutting the sound film, because the main burden of exposition is not thrown solely upon the visual image.

Suitable titles for the documentary can be made by super-imposing white lettering over a background scene directly tied in with the subject. Such superimpositions can be made either by double-exposure or double printing. An effective, if not especially original, device is that of beginning the film with the opening scene of action, fading in the titles over it, and then allowing the titles to fade out, so that the scene continues on into the action of the picture itself.

The documentary film offers an interesting challenge to the ambitious amateur cinematographer. It calls for no elaborate equipment or preparation, and the subject matter is unlimited. As the poet said, "The world is full of a number of things," and most of them can be pictured interestingly on 8mm. or 16mm. film by imaginative amateur cinematographers.

Historic Movies To Be Collected At George Eastman House

Important productions in the history of motion pictures will be collected and stored at George Eastman House, the international photographic center in Rochester, N.Y. American and foreign movies which trace the development of the motion picture from its beginnings in the early 1890's will be preserved for study by students of film art.

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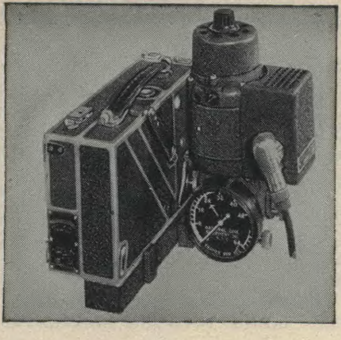

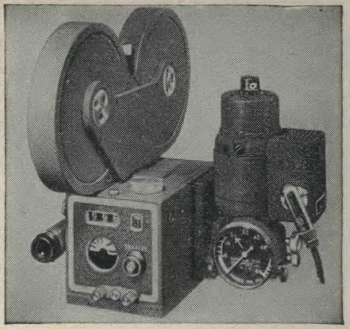

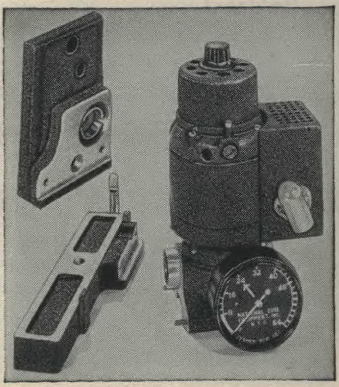

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UNDERWATER PHOTOGRAPHY

(Continued from Page 236)

in seven neutral shades from white through grey to black, and each experiment, under each set of conditions, of measured water clarity, consisted of a "run" swimming towards the target with the camera operating continuously from the limiting range of vision up to within one or two feet of the target. Various frames could then be picked out from the negative, corresponding to different distances of the camera from the target, by measuring target image size on the film; and since the films were processed under commercially controlled conditions, it was possible to measure the target and sea densities in a micro-densitometer and relate the contrast, in terms of density difference, to camera distance.

The next step necessary was to consider what could be chosen as the limiting contrast permissible in the negative for visibility in a photograph. The figure eventually chosen was contrast of 0.2 density difference or ratio of 1.6 to 1, which was found to give reasonably good reproduction. The range at which this limiting contrast was reached could then be plotted as limiting range against the other variables, and the following conclusions were reached:

(a) Water Clarity

The clarity of the water is the greatest factor in determining the limiting range of photography and even in the clearest water encountered off the coast of Malta, using a white object in summer sunshine at shallow depths, pictures of good contrast are not obtainable at (horizontal) distances of greater than 30 feet. This range is greatly reduced by increasing water turbidity, and the limiting range under the same conditions in Valetta Grand Harbor is reduced to 7 feet. The actual results obtainable under the different conditions of water clarity are illustrated by Fig. 3, which shows the target at different distances from the camera in six different locations. From these results, curves have been plotted enabling the range of limiting visibility of targets of any reflection factor to be predicted in waters of different clarity.

(b) Tone of Object

It will be seen from Fig. 3 that the white portion of the target is always brighter than the sea background, and the black part always darker, while a fairly dark grey nearly matches the sea in brightness even at very close ranges. The least visible grey tone with direct sunlight was found to have a reflection factor of about 16%. The lighter the object above this value, the more visible it becomes, and also the darker below this value, the more easily visible by silhouette. With direct sunlight, greater ranges can be obtained with white targets than with black, and it is interesting to note the greater effect of reflection factor at values around 16 per cent, where an increase from 20 per cent to 40 per cent reflection factor may give an increase in range from 7 to 22 feet, while an increase from 40 per cent to 80 per cent will only increase the range from 22 to 31 feet.

(c) Angle of Sunlight

The effect of tone of an object is entirely dependent on angle of lighting. When viewed looking towards the sun, all parts of the target are darker than the sea against which it is viewed and consequently the black tone becomes more visible, and the white tone less. This gives an indication of a possible way of improving the visibility of dark objects (below 16 per cent reflection factor) although the range obtained is never as great as for a white object directly illuminated by sunlight through the water.

(d) Depth

Increasing the depth at which photography is carried out, reduces the directional effect of the lighting as well as the intensity of both scattered and reflected light. The effect will vary with water clarity, but one result in very clear water shows a reduction of between 30 per cent and 40 per cent in range on increasing the depth from 6 feet to 40 feet.

(e) Exposure

In order to be able to estimate the correct exposure under water, a visual exposure meter was constructed. This instrument is a multiple spot type of brightness meter, having illuminated patches of different brightness on a transparent screen, through which the scene can be viewed. The spot most nearly matching in brightness the average brightness of the scene is noted, and the instrument can be calibrated directly in stop numbers for each spot, for a given combination of film emulsion and camera exposure time.

This exposure meter was used throughout the summer trials of 1948 and proved a useful tool for assessing correct exposure. Reasonable latitude, however, seems to exist in this factor, as the range of contrast in any given scene is usually low, and the negative can be exposed to register such a scene at any point along the straight line portion of the negative characteristic within quite wide limits.

(f) Film Emulsion

Ilford HP.3 film was mainly used for the trials, and was found very satisfactory on account of its speed and wide working range. Comparative tests were carried out by filming the target under the same conditions with two other types of film in rapid succession, and comparing the target contrasts and emulsion response characteristics when processed under commercially controlled conditions. The results of these tests showed that Ilford recording film (type 5.G.91) is slightly faster than HP.3, and when recording low densities can give greater contrast. Where sufficient light is available, the greatest range of visibility is given by Kodak "Background X" film, although this material has severe limitations for this work due to its low speed.

No improvement in contrast has been found under normal conditions by using a polarizing filter over the camera lens, although tests were made by rotating the camera about the optical axis to determine whether there was any critical angle of orientation at which selective absorption of the scattered light took place. The possibility of such a filter being of use with artificial lighting, where the relative positions of light source and camera are more closely controlled, has not however been ruled out.

Work in turbid water has shown that there is no advantage in the use of color filters, but it has since been pointed out that a light haze-cutting filter has been found by some workers to be of value in clearer water, in view of the greater amount of scattered light in the blue region of the spectrum. We have, however, been more concerned with trying to improve the visibility in poor water to approach that in clear water than with improving the latter. One way to do this is to bring the lighting under control.

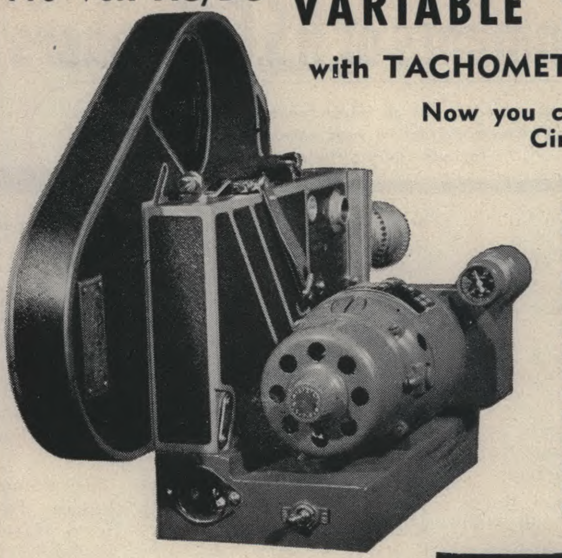
In turbid waters, the daylight scattered by the large quantity of material in suspension reduces the contrast of the object with its surroundings very greatly, even at a distance of a few feet, and absorption by the particles reduces even the bright Mediterranean sunlight below the limit for photography at 20 or 30 feet. Under these conditions, artificial lighting must satisfy two requirements: it must provide sufficient light to register on the photographic emulsion, and it must be so designed and applied as to bring out the maximum contrast between the object and its surroundings.

Artificial lighting has also its use in clear or fairly clear water where the object, which may be the side or bottom of a wreck, is in very deep shadow, or where a ship's propeller or bottom plates are to be photographed and are thrown into deep shadow by the hull. In all cases where there is still sufficient daylight to affect the film, it is preferable to do the photography at night, when it will be found that, with proper placing of the lights, the contrast can be improved over that obtainable in daytime.

The equipment developed experimentally for underwater lighting comprises at present 250-watt and 400-watt mercury-vapor and 45-watt sodium-vapor floodlights, using trough reflectors of anodized aluminum. These floodlights can be arranged to cover an area of two or three square feet from a short range, and are equipped with screens to prevent direct lamplight from illuminating the water between the object and the camera.

In addition to these floodlights, a 250-watt mercury-vapor spotlight with a 4-inch diameter beam of small divergence is available for increasing the illumination on a small detail of the scene, or to enhance contrast by cross-lighting. This spotlight, or the 250-watt floodlight, can be operated from a 250-watt portable gas-generator; the sodium-vapor lamp, with a 24-volt battery-driven generator.

NOTE: Mr. Collins' article on Underwater Photography will be continued next month and will describe the design of cine cameras for underwater photography, diving technique, and the results obtained.—EDITOR.



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Current Assignments of A.S.C. Members

Major film productions on which members of the American Society of Cinematographers were engaged as directors of photography during the past month.

Columbia

- Harry Stradling, "Valentino," (Edward Small Prod.) with Tony Dexter, Eleanor Parker and Richard Carlson. Lewis Allen, director.
- Ira Morgan, "Pygmy Island," with Johnny Weismuller and Ann Savage. William Berke, director.
- Phil Tannura, "Counterspy Meets Scotland Yard," with Amanda Blake and Howard St. John. Seymour Friedman, director.
- Lee Garmes, "The Hero," (Sidney Buchman Enterprises) with John Derek and Aldo Da Re. David Miller, director.
- Joseph Walker, "Born Yesterday," with Broderick Crawford, Judy Holliday, William Holden, and Millard Mitchell. George Cukor, director.

Independent

- Russell Harlan, "Counterfeit," (Famous Pictures) with Don DeFore, Andrea King and George Tobias. Boris Ingster, director.
- Jack Cardiff, "Pandora And The Flying Dutchman," (Lewin-Kaufman Prod., shooting in Europe) with James Mason, Ava Gardner. Albert Lewin, director.
- Robert DeGrasse, "The First Legion," (Leo Prod.) with Charles Boyer, William Demarest, Walter Hampden, Barbara Rush. Douglas Sirk, director.
- Marcel LePicard, "Again Pioneers," (Protestant Film Comm.) with Colleen Townsend, Regis Toomey, Russell Hicks, Sarah Padden. William Beaudine, director.
- Russell Harlan, "The Gun," (Phoenix Films) with Lee Cobb, Jane Wyatt, and John Dall. Felix Feist, director.
- Ernest Laszlo, "M," (Superior Films) with David Wayne, Steve Broidy, Glenn Anders and Walter Burke. Joseph Losey, director.
- Fred Jackman, Jr., "The Man With My Face," (Ed Gardner Prod. — Shooting in Puerto Rico) with Barry Nelson, Betty Lou Gerson, Carol Mathews, and John Harvey. Edward Montague, director.

Lippert

- Karl Struss, "The Return of Jesse James," with John Ireland, Ann Dvorak, and Henry Hull. Arthur Hilton, director.
- Benjamin Kline, "Holiday Rythm," with Mary Beth Hughes, Donald McBride and Wally Vernon. Jack Scholl, director.

M-G-M

- Harold Rossen, "To Please A Lady," with Clark Gable and Barbara Stanwyck. Clarence Brown, director.
- Charles Rosher, "Pagan Love Song," (Technicolor — shooting in Hawaii) with Esther Williams and Howard Keel. Robert Alton, director.
- Paul Vogel, "Watch the Birdie," with Red Skelton, Arlene Dahl, Ann Miller, Pamella Britton and Leon Ames. Jack Donohue, director.
- John Alton, "Grounds For Marriage," with Van Johnson, Kathryn Grayson, George Murphy, and Paul Raymond. Robert Z. Leonard, director.
- Joseph Ruttenberg, "It's A Big Country," with Janet Leigh, Gene Kelly and S. Z. Sakall. Charles Vidor, director.
- Robert Surtees and William Skall, "Quo Vadis," (Shooting In Italy) with Robert Taylor, Deborah Kerr. Mervyn LeRoy, director.
- Ray June, "Mrs. O'Malley and Mr. Malone," with Marjorie Main, James Whitmore, Ann Dvorak, Phyllis Kirk, Dorothy Malone. Norman Taurog, director.
- Alfred Gilks, "Shep Of The Painted Hills," (Technicolor) with Lassie, Paul Kelly, Bruce Cowling, Gary Gray. Harold F. Kress, director.
- George Folsey, "Vengeance Valley," (Technicolor) with Burt Lancaster, Robert Walker, Joanne Drue, John Ireland, Sally Forrest. Richard Thorpe, director.

Monogram

- William Sickner, "Bomba And The Hidden City," with John Sheffield and Sue England. Ford Beebe, director.
- Harry Neumann, "Mexican Silver," with Whip Wilson, Andy Clyde and Virginia Herrick. Wallace Fox, director.
- William Sickner, "Tall Timber," with Roddy McDowall, Jeff Donnell, Lynn Thomas and Lyle Thomas. Jean Yarbrough, director.

Paramount

- George Barnes, "Mr. And Miss Anonymous," with Joan Fontaine, Ray Milland, and Teresa Wright. George Stevens, director.
- Charles Lang, "A Relative Stranger," with Gene Tierney, John Lund, and Miriam Hopkins. Mitchel Leisen, director.
- Ray Rennahan, "The Great Missouri Raid," (Nat Holt Prod.—In Technicolor) with Wendell Corey, MacDonald Carey, Ward Bond and Ellen Drew. Gordon Douglas, director.
- W. Howard Greene, "Quebec," (LeMay Templeton Prod.) with John Barrymore, Jr., Corinne Calvet, Patric Knowles, Barbara Rush. George Templeton, director.

R.K.O.

- J. Roy Hunt, "Rio Grande Patrol," with Tim Holt, Richard Martin, Jane Nigh. Lesley Selander, director.
- Nick Muscara, "The Man He Found," with Elliott Reid. William Cameron Menzies, director.
- Joseph Biroc, "Cry Danger," (Olympic Prod.) with Dick Powell, Rhonda Fleming, and Regis Toomey. Richard Parrish, director.
- Frank Redman, "Crack Down," with Bill Williams, Robert Armstrong, Frank McHugh. Leon Barsha, director.

Republic

- Archie Stout, "Rio Bravo," with John Wayne, Maureen O'Hara, Ben Johnson, Claude Jarman, Jr., Chill Wills. John Ford, director.

20th Century-Fox

- Charles G. Clarke, "I'll Get By," (Technicolor) with June Haver, William Lundigan, Harry James, Gloria de Haven and Dennis Day. Richard Sale, director.
- Harry Jackson, "American Guerillas In The Philippines," (Technicolor — shooting in the Philippines) with Tyrone Power, Micheline Prelle, Tom Ewell, Jack Elam and Tommy Cook. Fritz Lang, director.
- Milton Krasner, "All About Eve," with Bette Davis, Anne Baxter, Celeste Holm and George Sanders. Joseph Mankiewicz, director.
- Winton Hoch, "The Halls Of Montezuma," (Technicolor — shooting in Mexico) with Richard Widmark, Reginald Gardiner, Skip Homeier. Lewis Milestone, director.
- Edward Cronjager, "I'd Climb The Highest Mountain," (Technicolor with Susan Hayward, Wm. Lundigan, Rory Calhoun, Lynn Bari, Ruth Donnelly. Henry King, director.
- Joe McDonald, "Fourteen Hours," with Paul Douglas, Richard Basehart, Deborah Paget, Jeff Corey, Agnes Morehead. Henry Hathaway, director.
- Joseph LaShelle, "The Jackpot," with James Stewart, Patricia Medina, Alan Mowbray, James Gleason, Natalie Wood. Walter Lang, director.
- Leo Tover, "For Heaven's Sake," with Clifton Webb, Joan Bennett, Robert Cummings, Edmund Gwenn, and Joan Blondell. George Seaton, director.

United Artists

- Guy Roe, "Sound Of Fury," (Robt. Stillman Prod.) with Frank Lovejoy, Kathleen Ryan, Richard Carlson, Lloyd Bridges and Adele Jergens. Cyril Endfield, director.

Universal-International

- Maury Gertsman, "Frenchie," with Joel McCrea, Shelly Winters, Paul Kelly, and Elsa Lanchester. Louis King, director.
- Cliff Stine, "The Milkman," with Donald O'Connor, Jimmy Durante, Piper Laurie and Joyce Holden. Charles Barton, director.
- William Daniels, "Harvey," with James Stewart, Josephine Hull, Peggy Dow, Charles Drake. Kenry Koster, director.
- George Robinson, "Abbott And Costello In The Foreign Legion," with Abbott and Costello, Patricia Medina, Walter Slezak and Douglas Dumbrille. Charles Lamont, director.
- Hal Mohr, "Woman On The Run," (Fidelity Prodn.) with Ann Sheridan, Dennis O'Keefe, Robert Keith, and Frank Jenks. Norman Foster, director.
- Russell Metty, "Wyoming Mail," (Technicolor) with Stephen McNally, Alexis Smith and Charles Kemper. Reginald LeBorg, director.
- Henry Freulich, "Under The Gun," with Richard Conte, Audrey Totter, and John McIntyre. Ted Tetzlaff, director.
- Irving Glassberg, "Kansas Raiders," (Technicolor) with Audie Murphy, Brian Donlevy, Marguerite Chapman, and Scott Brady. Ray Enright, director.
- Charles Boyle, "Tomahawk," (Technicolor) with Van Heflin, Yvonne De Carlo, Preston Foster, Jack Oakie. George Sherman, director.
- Russell Metty, "Katie," with Ann Blyth and Mark Stevens. Frederick de Cordova, director.

Warner Brothers

- Ernest Haller, "Dallas," (Technicolor).
- Ted McCord, "Rocky Mountain."
- Sidney Hickox, "The West Point Story."

DEEP FOCUS AND LONGER TAKES

(Continued from Page 235)

"For one thing," he said, "the Garutso lens contributes greatly to the 'long-take' technique, enabling the director to obtain takes of greatly sustained action and thereby reducing the number of camera setups. One camera take for 'Three Husbands' ran six script pages in length. This was a scene of a poker game involving six players. Throughout the picture, we did numerous scenes running two and three pages of dialogue in extent.

"Where some diffusion is desired in certain set areas, it is advisable to accomplish this with light and shadow, rather than with diffusion filters. Why do I object so to diffusion? Well, for example, if I have a player in the foreground and a second player full figure in the background, a little diffusion in such a case might be advantageous. But to employ a diffusion filter would adversely affect player in the background. In such a case, I would prefer to forego the filter and induce a measure of diffusion with light and shadow." Using this technique with the Garutso lens, Planer said, the person in the background, although subdued to some extent by the lighting, would nevertheless be rendered sharp and distinct, as witness the result in Fig. 2, a scene from "Three Husbands."

"There are marked savings to be gained in production costs due to ability of the deeper focus lens to pick up the smallest facial expression of an entire group of actors without the necessity of shifting camera and lights for individual closeups. All this makes set lighting simpler, too — and less costly. The director can stage much longer scenes, showing the emotions of players to greater advantage, without the necessity of numerous cuts. Irving Ries, who directed 'Three Husbands,' is not exaggerating when he says that we reduced our camera setups at least one-fifth on this picture, using the Garutso lens. In editing, too, the staging technique made possible by this lens eliminated a great deal of cutting.

"Finally, use of the lens benefits the players. Director Ries found that his players gave a better, more sincere performance in 'long-takes' where the action and dialogue is sustained, uninterrupted by the usual cuts for new camera setups. In 'Three Husbands' I employed a dolly shot that followed the players around the set in a continuous take that encompassed eight pages of dialogue. Obviously the players' performances are enhanced by the sustained mood. Jonothan Hale, veteran stage actor who plays an important role in the picture, said use of the new lens changed his entire cinemacting technique. 'It's more like the stage,' he said, 'and results in more sincere performances.'

"Having felt my way along, so to speak, filming 'Three Husbands' with this lens, I undertook the later assignment — 'The Dungeon'— in the same exploring mood, for here was a picture of another sort: a low-key mystery drama, quite different from the gay, frivolous 'Three Husbands.' In this picture I gained new experiences with the lens, shooting night scenes in daylight with Plus-X film. Ordinarily, I would use a very heavy 'night effects' filter and shoot with the lens wide open in filming scenes of this nature. Using the Garutso, I gained an additional half-stop in exposure, enabling me to add still another filter for additional quality in the night effect shot.

"Now for the first time since inception of motion pictures," Planer concluded, "we have a lens that produces marked plasticity in composition — a lens that brings cinematography a step nearer the goal of the long-sought three-dimension. Where previously it had been used successfully only for filming small motion pictures and for television purposes, the Garutso may now be used with confidence by any director of photography for any type production, major or minor, once he familiarizes himself with the lens and its wide range of pictorial possibilities."

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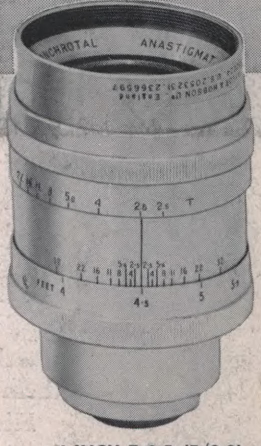

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